

cop. AL 2.1985-519  
#2

# LIGHT HORSE

## UNIT II



PROJECT BOOK  
455-84

Dow  
5549798



#### 4-H MOTTO

Learn to do by doing.

#### 4-H PLEDGE

I pledge  
My HEAD to clearer thinking,  
My HEART to greater loyalty,  
My HANDS to larger service,  
My HEALTH to better living,  
For my club, my community and my country

#### 4-H GRACE

(Tune of Auld Lang Syne)

We thank thee, Lord, for blessings great  
On this, our own fair land.  
Teach us to serve thee joyfully,  
With head, heart, health and hand.

If any portion of this manual is used for another publication, credit must be given to 4-H Branch Alberta Agriculture.







# INTRODUCTION

## TABLE OF CONTENTS

	PAGE
INTRODUCTION . . . . .	1
SAFETY . . . . .	2
THE WESTERN SADDLE . . . . .	5
BITS . . . . .	7
HACKAMORES . . . . .	13
OTHER TACK AND EQUIPMENT . . . . .	15
HOOF CARE . . . . .	19
JUDGING CONFORMATION . . . . .	25
LAMENESS . . . . .	39
PSYCHOLOGY OF THE HORSE . . . . .	48
PREPARING HALTER HORSES . . . . .	56
LONGING . . . . .	60
RIDING . . . . .	63
SUGGESTIONS FOR PLANNING, PREPARING, AND PRESENTING HORSE DEMONSTRATIONS . . . . .	72
GLOSSARY . . . . .	76
METRIC CONVERSION TABLE . . . . .	84
PROJECT EVALUATION . . . . .	86

TABLE 1

Line	Item
1	INTERESTS
2	.....
3	.....
4	THE WESTERN BANK
5	.....
6	.....
7	.....
8	.....
9	.....
10	.....
11	.....
12	.....
13	.....
14	.....
15	.....
16	.....
17	.....
18	.....
19	.....
20	.....
21	.....
22	.....
23	.....
24	.....
25	.....
26	.....
27	.....
28	.....
29	.....
30	.....
31	.....
32	.....
33	.....
34	.....
35	.....
36	.....
37	.....
38	.....
39	.....
40	.....
41	.....
42	.....
43	.....
44	.....
45	.....
46	.....
47	.....
48	.....
49	.....
50	.....
51	.....
52	.....
53	.....
54	.....
55	.....
56	.....
57	.....
58	.....
59	.....
60	.....
61	.....
62	.....
63	.....
64	.....
65	.....
66	.....
67	.....
68	.....
69	.....
70	.....
71	.....
72	.....
73	.....
74	.....
75	.....
76	.....
77	.....
78	.....
79	.....
80	.....
81	.....
82	.....
83	.....
84	.....
85	.....
86	.....
87	.....
88	.....
89	.....
90	.....
91	.....
92	.....
93	.....
94	.....
95	.....
96	.....
97	.....
98	.....
99	.....
100	.....

# INTRODUCTION

The purpose of the 4-H Light Horse Program is to develop the skills of members in all areas of light horse husbandry. Horsemanship will be stressed at all levels. The purpose is to develop self-discipline, patience, responsibility, respect, self reliance and pride in accomplishment as skills and knowledge are gained. As a result of the time and work spent in 4-H the members should be successful and continue to be interested in horses.

No time limit should be set on the progress between the 4-H Levels. While members may learn the written material easily, the practical areas of horsemanship require understanding, time, and patience. Correct riding skills may take considerable time to develop.

Care should be taken not to advance too quickly through Level II. Although the skills sound simple, they form the basis for more advanced training of the horse. These skills become more important. When handling horses you must repeat the skills the same way every time you work with the horse.

Level II forms the foundation for more advanced skills for the horse and rider. Members should be able to ride and handle horses for pleasure and limited performance. The last two levels are designed for members interested in learning specific skills. Not all of the subjects covered in the manuals will have practical use to all members.

The mounted section of Unit II requires the horse and rider to work as a single unit. While the requirements sound easy, they take a large amount of training for the horse and rider. It is not recommended that fewer than two years be allowed for Level II. Completion of the riding unit will be a score of 75 or higher on the riding test. While the test is not required, it will give you some idea about whether you and your horse are ready to begin more difficult skills.

A unit is available for those members interested in training a young horse. This requires a wide variety of skills. For this reason, it is not recommended for members who have not completed Level II by the time the horse is two years of age. Level II is to be completed in two years. Physical strength of the member must be considered because of the difficulty with some of the work.

The age and training of the project horse affects the success of the member. Beginning riders do better with quiet, older horses. These horses can learn new skills as the ability of the rider improves. A younger horse must be worked on basic skills, until it is physically and mentally able to learn more difficult skills. The changes that occur through the member's own work are satisfying and reflects on the ability of the member.



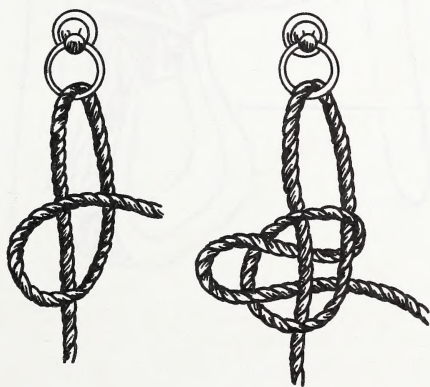
# SAFETY

Caution must be taken, around even the quietest horse. Accidents can happen when you do not expect them. Here are some important points.

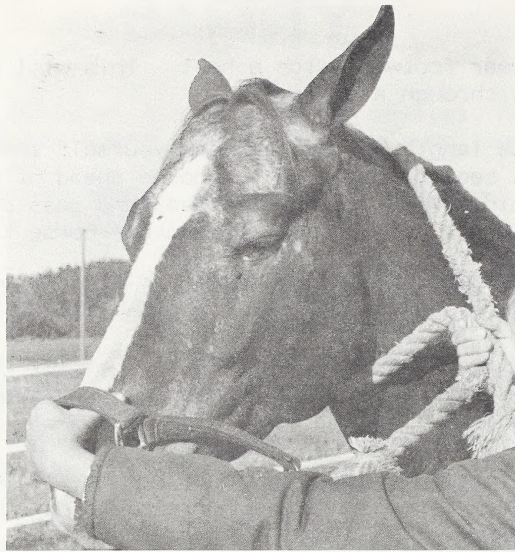
1. Do not run around horses. They react to movement before they see the cause of it.
2. When approaching a horse, walk toward the shoulder. Do not come from behind. You may get kicked.
3. To approach a horse in a tie stall, speak to the horse as you come to the side of the stall. Reach forward and touch the hindquarter. Wait for the head to turn slightly toward you before going into the stall. Most horses will kick if they are approached without warning when they are asleep.
4. Lead a horse from the left side, walk between the head and shoulder. This gives you control of the head. If you are walking in front of the horse or beside the shoulder, the horse could knock you over if it spooks.
5. Hold the lead shank fairly short. If the lead shank is very long, the horse can swing around and knock you over or kick you. This can happen easily if there are other horses around.
6. Fold the extra shank length in a figure "8" in your hand. A dangling rope can be tripped on. A rope that is held in a coil can tighten around your hand if the horse pulls back. You can get dragged or get a badly scraped hand. Do not tie the horse to any part of your body. If the horse spooks you could be dragged and badly hurt.
7. When you are grooming a horse wear protective footwear. Do not wear runners, thongs or go barefoot.
8. If possible, do not go under the neck of a horse to get to the other side. Because of the vision of a horse, you will be popping in and out of view. Go around the hindquarters. Talk to the horse and pet it as you go around. Stay very close. If you are kicked at a short distance you may only get a bruise. The force of a kick when the leg is nearly extended has more force and can break bones. You may also walk behind out of the range of the horse (4-5 metres or 10-15 feet).
9. When working under the horse, do not sit or kneel. If the horse moves you will not be able to get out of the way. A hand placed on the ground as you work can easily be stepped on. Bend over if you are working lower down on the body. For extra safety, place one hand firmly against the horse. If the horse spooks, it will help you push out of the way quickly.
10. When you are riding or grooming do not wear anything that dangles. It can get hooked or broken.



11. When riding, wear footwear with a heel. This will reduce the risk of putting a foot through a stirrup.
12. Allow one horse length or more between yourself and the next rider. If you can not see the heels of the horse ahead of you, you are too close. To avoid being kicked, move over and pass or circle back. When passing to not cut in front of another horse too quickly.
13. If a horse runs away while it is being ridden, everyone should stop. Without company the horse will slow down and stop.
14. When bringing a strange horse into the group, let the horses get acquainted with each other over the fence before turning them out together.
15. If you are on foot in a group of loose horses, allow space between yourself and each horse in case a horse kicks or bolts suddenly.
16. Use caution when crossing paved highways or roads because the footing is slippery for the horse. Dismounting and leading the horse across is best.
17. Do not mount your horse in a barn or close to the overhanging edge of a roof.
18. When you tie your horse, tie it to a secure object that will not break or move if the horse pulls back.
19. Tie the horse at least 1 meter from the ground. Tie your horse short enough that it can not get a leg over the rope.
20. When tying your horse, use a quick release knot. (see example below).



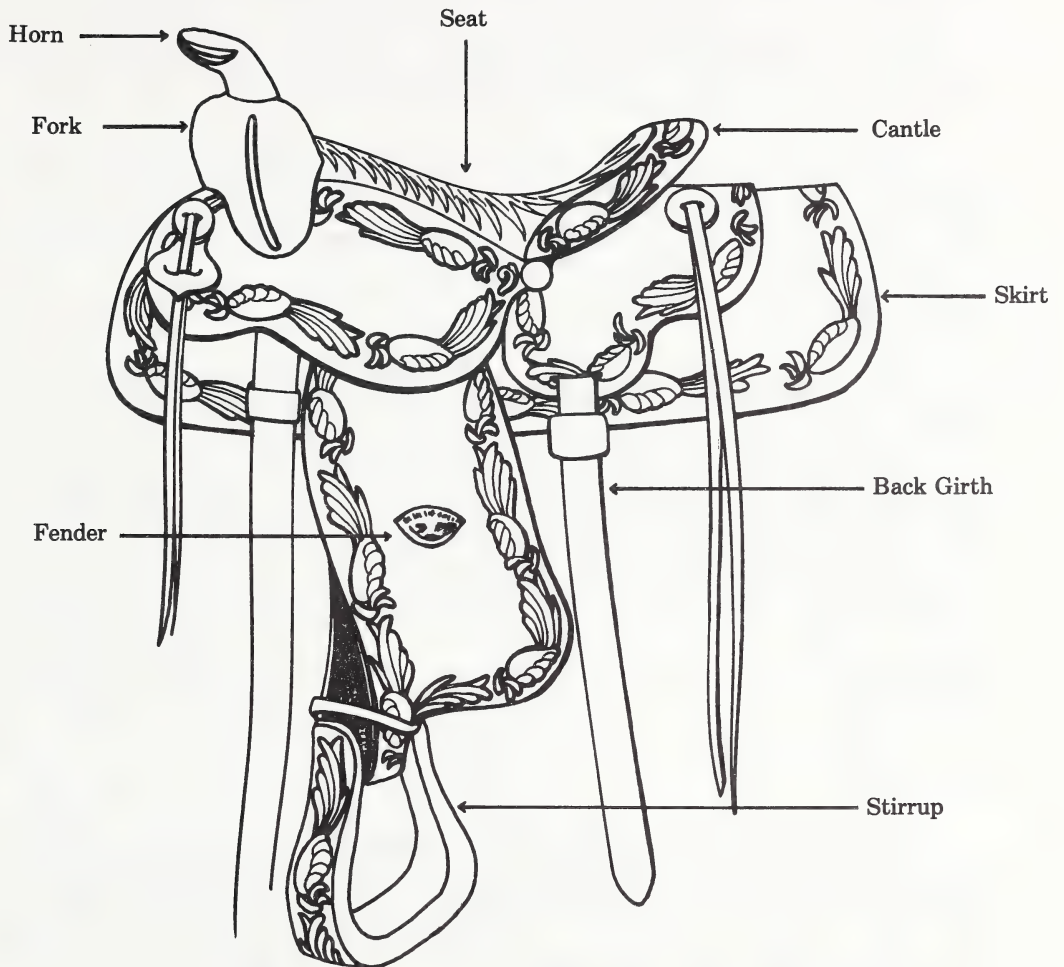
21. Halter the horse so that it can not pull away or bump into you.



Correct haltering. The rope is around the neck of the horse. The handler is behind the head of the horse where he or she can not be easily bumped.

22. Do not go into a horse trailer on the same side as the horse unless there is an open side escape hatch. You can be very badly injured if the horse spooks.
23. If you are holding the lead shank of a horse in a trailer, do it so your hand will not be scraped on metal or partitions if the horse pulls back.
24. For the safety of your horse, keep your fences in good condition. Check stalls for nails or splinters sticking out. Check your yard for loose nails, broken glass, wires, etc.

# THE WESTERN SADDLE





## CHOOSING A SADDLE

It can be hard to get a good fit with a saddle for both the horse and rider. In most families several people will use the same saddle on different horses.

The way a saddle fits a horse depends on the shape of the withers. The withers and back vary in shape. This means that a saddle can rub at the withers, slide back out of place or be too long for the horse.

If the saddle fits over the withers, you should be able to fit two fingers into the space between the fork and the withers. When there is less space than this it may rub.

Saddles may also be the wrong width at the withers. When it is too wide for the horse, use heavy saddle pads to fill the space. If it is too narrow, extra saddle blankets will help, but the horse can get blisters if you ride for very long. This is what has happened when you see white spots on the withers of a solid colored horse.

## SADDLE SIZE

The size of saddle seats varies. If you share a saddle with other people, you are better to have a saddle a bit large than one that is too small for the bigger person.

Most of the smaller saddles have a 14  $\frac{3}{4}$  seat. A large saddle has a 15" seat. The angle of the cantle and the fork can make saddles feel very different.

## SADDLE SIZING

<u>Rider Height</u>	<u>Weight</u>	<u>Saddle Seat Size</u>
5'1" - 5'6"	100-130	14 $\frac{3}{4}$
5'4" - 5'6"	120-150	14 $\frac{3}{4}$
5'5" - 5'10"	135-165	15
over 5'10"	170 and over	15 or 15 $\frac{1}{2}$

Saddles are designed for comfort. The seat of the saddle should be nearly flat. If there is too much angle you will not be able to sit properly. Seats can be smooth leather or suede. Most saddles have tooling. As well as looking nice, tooling helps you stick to the saddle.

## CLEANING LEATHER RIDING EQUIPMENT

Tack is expensive to buy and replace. This makes it important that we keep it in good condition. A good saddle or bridle can be used for more than 25 years.



## CLEANING

1. Clean any metal ornaments on the saddle.
2. Wipe the saddle with a dry cloth or a soft brush to take off the dirt. If your saddle is very dirty use mild soapy water.
3. Use glycerine soap and a soft brush or sponge to lather the soap.
4. Dry the saddle at room temperature in a shady spot.
5. Paint with a light coat of warm neatsfoot oil. Do not oil the cinch strap. It is treated to keep perspiration from soaking in.
6. Wait until the oil is absorbed then wipe on a thin coat of saddle soap. Rub it in gently.
7. Let the saddle dry and then polish it with a soft cloth.
8. Wash out cinches in cool water. Rinse well. Soap makes horses itchy.

## **BITS**

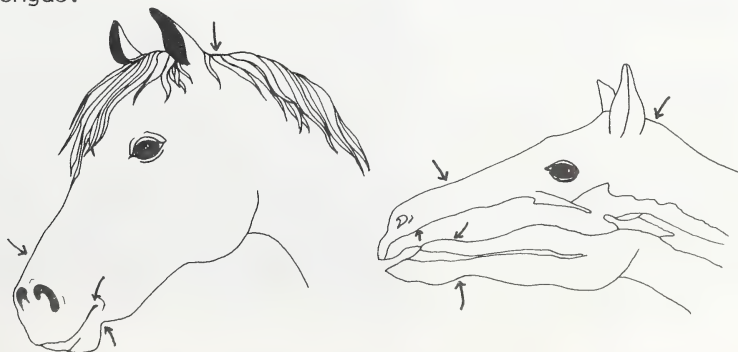
The choice of bit is important to the performance of the horse. The bit and bridle work together to put pressure on sensitive parts of the horse's head.

A variety of bits are available because every horse is different. Many of the highly bred horses have thin sensitive mouths, while others may be less sensitive. In some cases a horse may have very little feeling in the mouth. Choice of the bit is important to make your horse respond.

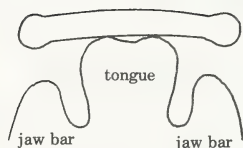
In order to select a bit that meets your needs, you need to know what is available and how they work.

### The Pressure Points of the Horse's Head

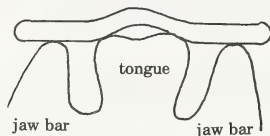
The use and design of the bit developed as the knowledge about the horse grew. A bit and bridle are designed to put pressure on sensitive parts of the head and mouth. There are seven known pressure points. These are the bars, chin groove, lips, nasal bone, palate (roof of the mouth), poll and tongue.



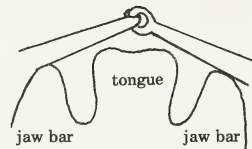
**Bars** - The space on the lower jaw between the front teeth (incisors) and the grinding teeth (molars) where the bit rests. In general the skin over the bone is very thin. The straight or port bits act on this area by using downward pressure. A jointed bit will have a pinching action on the bars, but does not put pressure on any other part of the mouth. Unless the bit is adjusted correctly, the bit may not fit the space properly and hit against the teeth.



Most of the pressure on bars, less on tongue.



More pressure on the bars, less on the tongue.



Pressure on the tongue, not on the bars.

**Chin Groove** - This is the jaw bone just behind the bulge of the chin. A curb chain or leather curb strap attached to a pelham or curb bit fits across the chin groove. The curb acts evenly on short-mouth horses, and on the outer jaw bones of long-mouth horses. Pulling the reins backward makes the bit rotate forward in the mouth of the horse and tighten the curb strap or chin. The purpose is to have the horse set its head against the pressure and bring its head into a nearly vertical position.

**Lips** - The bit rests on the lips at the corners of the mouth. After early training the bit should fit so that one wrinkle shows on the lip. There is always some pressure on the lips. With most bits there is downward pressure. Jointed bits will also give some pinching action. Too much pressure can happen if the sidepieces of the bit are not wide enough for the mouth.

**Nasal Bone** - The bone down the front of the face, just above the nostrils. This includes the cartilage. The area is very sensitive. The pressure of a noseband or standing martingale will cause pain.

**Palate** - the palate is the roof of the mouth. Jointed, double-jointed and port bits all hit the palate of the mouth when rein pressure is used. If the bit is not used properly it can cause discomfort or pain.

**Poll** - The top of the head behind the ears. The crownpiece of the headstall causes discomfort in this area when pressure is applied to the bit. The horse is expected to move against the pressure.

Tongue - All bits put some pressure on the tongue. The tongue of the horse is at least as sensitive as our tongue. In general bits push the tongue down into the mouth. A straight bit puts more downward pressure on the tongue than a jointed bit. A jointed bit gives the tongue more room.

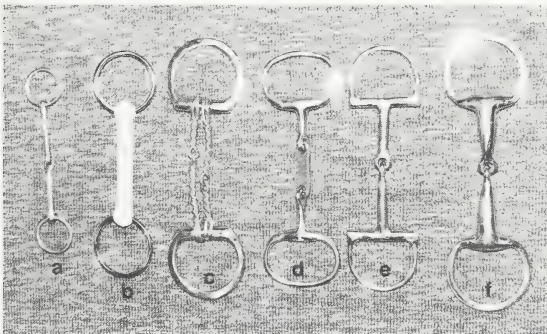
The tongue affects how the bit will sit on the bars. A thick tongue can lift the bit off the bars. A horse with a thick tongue will need a snaffle with a thicker joint or a higher port in a curb bit to keep pressure on the bars. Some of these horses are not comfortable with a jointed bit because it pinches the tongue. A high port takes pressure off the tongue, but if they are not used properly put more pressure on the palate if the head is vertical. A bit with a very high port is meant to be carried flat against the tongue.

### KINDS OF BITS

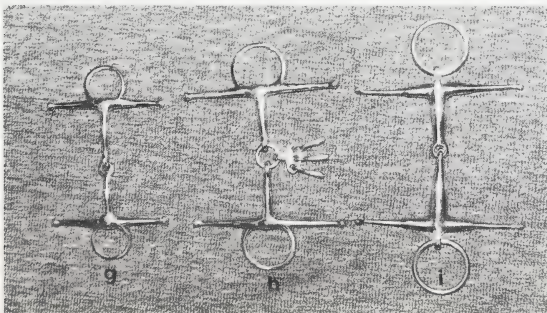
Bits can be divided into three groups. These are the snaffle, pelham and curb. There is a wide variety of bits in each group.

#### Snaffle Bits

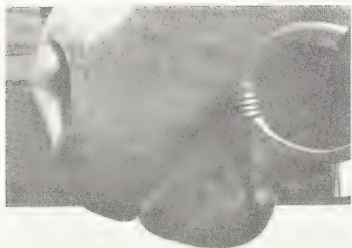
The snaffle bit is generally a gentle bit. The side pieces are types of rings. They may be a round ring, egg butt, racing dee or full cheek. Snaffle bits are used for general riding, training, dressage, jumping and racing. A snaffle bit may have any type of mouthpiece. The most popular snaffle bits have a jointed mouth piece.



- a. Birdoon
- b. Rubber round snaffle
- c. Running W
- d. Dr. Bristol
- e. D-ring wire mouth
- f. Hollow mouth egg butt
- g. Full cheek snaffle
- h. Full cheek with kegs
- i. Fulmer

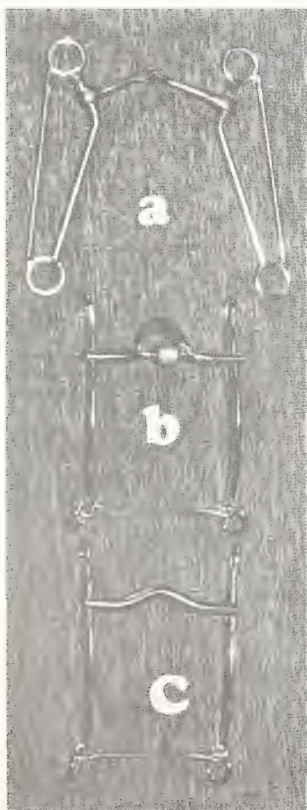


The snaffle bit puts pressure on the tongue, bars and lips of the horse. Rein pressure is usually applied to one side of the bit at a time. It should be adjusted to fit slightly loose in the mouth. There does not need to be a wrinkle above the corner of the mouth.



### Curb Bits

The curb bit is any bit with long shanks (cheekpieces). These may be straight or curved. The bit puts pressure on the bars, tongue, lips, chin groove and poll. Depending on the mouthpiece, there may be pressure on the palate. All curb bits are meant to be used with a curb strap or curb chain. This is used for leverage of the bit and to stop the horse from stiffening its lower jaw against the bit.



- a. curb bit  
broken mouth-piece
- b. curb with a cricket  
and covered port
- c. curb with a raised port



To fit correctly, the bit should rest against the corner of the mouth so that one wrinkle forms

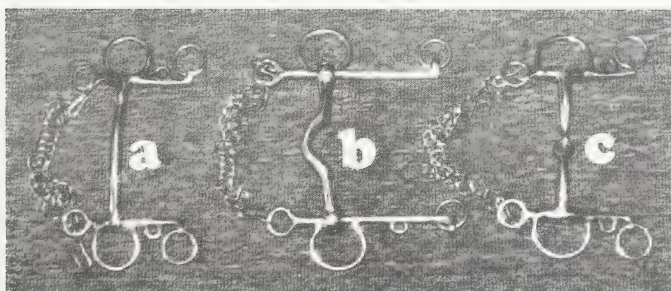
The curb bit can have a jointed mouthpiece, a straight port, or a raised port. The curb bit with a broken mouthpiece is often called a snaffle by mistake. The long shanks change the way the bit works in the mouth and on the pressure points. It is not a mild bit. It is a very severe bit. When the rider pulls on the reins, the bit folds like a nutcracker. This forces the joint up into the palate. If this has not caused enough pain, the bit pinches the tongue and bars while the curb strap pinches the chin groove. It works well on a horse that can not be controlled by other bits. In most cases, do not use this bit.



One type of western bit is the spade bit. It is a curb bit with a very high port. When the horse holds its head in a vertical position the port lies flat on the tongue. If the nose is lifted or the reins are jerked, the port will hit the palate. This is painful. Because of the chance of damage to the mouth, the bit should only be used by an experienced rider on a well trained horse.

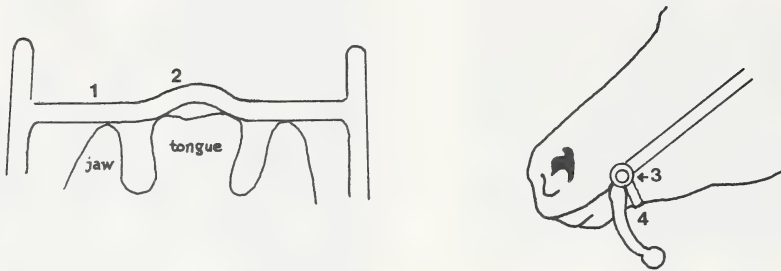
#### Pelham Bits

The pelham is a confusing looking bit used by English riders. The bit combines some of the features of the snaffle and curb bit. On top of a short shank is an opening for the cheekpiece of the bridle, and a hook for the curb chain. Next to the mouthpiece is a large ring to attach the snaffle reins. At the bottom of a long shank there are rings to attach the curb reins. This produces the same type of leverage as the curb bit when used.



- a. Pelham straight port
- b. Pelham raised port
- c. Pelham broken mouthpiece

Adding the long lower shank and curb strap or chain adds one more pressure point, the chin groove.



### BITTING PROBLEMS

There are a variety of problems riders and horses have with bits. Most of them are caused by a lack of understanding.

"Overbridling" is one of the most common problems. The rider uses too harsh a bit on the horse. This usually makes the behavior worse, so a more severe bit is used. This can cause the horse to travel over the bit, above the bit or behind the bit. It can also cause rearing or unexpected backing. With rough handling the horse will get a damaged mouth. Damage is permanent, and no bit will be very effective.

Other common mistakes;

- Using a "Tom Thumb" or other long shank bit with a broken mouthpiece as a snaffle.
- Using non-snaffle bits with training equipment such as side reins, running martingale, and draw reins. This can damage the mouth.
- Not using a curb strap or chain with a curb or pelham bit.
- Bit not properly adjusted to rest on the bars of the mouth. This may make the teeth or corners of the mouth sore depending on the problem.
- Bit too narrow for the mouth. The rubbing will make the mouth sore and may cause rawness.
- A thin bit is more severe than a thicker bit with the same type of mouthpiece.
- Curb strap or chain not properly adjusted.
- Always using a harsh bit when it is not necessary.

# HACKAMORES

The hackamore is usually used in early training to prevent injury to the mouth of the horse. It is popular with Western trainers because they can use the hackamore for training "reining and cattle" horses safely.

The hackamore works on pressure points of the head much like the bit. However, the pressure is in different places. With the hackamore the pressure is on the nasal bone and the chin groove. A small amount of pressure may be felt at the poll, depending on the headstall.

Like the bit, the hackamore must be adjusted for fit. The main parts of the hackamore are the;

**Bosal** (boz-al) - The bosal is the nose-piece of the hackamore. It is usually made of braided rawhide, but leather, horsehair and rope may be used. Most riders prefer the rawhide bosal because it is easier to shape to the horse. Bosals range in thickness from pencil size to nearly 3 cm in diameter. The features of the bosal are nose and cheek buttons and a large heel knot.

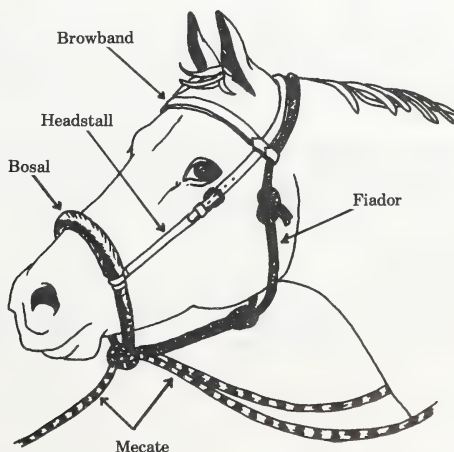
**Fiador** (fee-ah-door) - This is a rope that extends from the neck at the base of the head to the heel knot of the bosal. It holds the headstall in place, like the throatlatch of a bridle when the horse is tied by the mecate instead of a halter and rope. The fiador also keeps the bosal from slipping down the nose.

**Headstall** - This is attached to the bosal on both sides, it passes over the head and behind the ears. They are usually made from leather. A browband may be used to keep the headstall from slipping on the neck.

**Mecate** (meh-ka-teh) - This is a rope used in place of reins. It is used as a single rein. When the mecate is attached to the bosal one length is left free. The remainder of the mecate is then wrapped to form the single rein. This was originally used to ground tie the horse, and may be used for tying the horse instead of a halter and rope.

**Reins** - Reins may be used in place of a mecate. They may be made of leather or rope.

Parts of the Hackamore.



The harshness of the hackamore depends on the material the bosal is made from, its thickness and stiffness. In general a thick, soft bosal is more gentle. A thin hard bosal is more severe.

Like bits, the hackamore needs to fit the horse, and be set correctly on the nose. If it is set to high or loose, the rider will not have proper control.

The bosal should be set low on the nose cartilage. This encourages the horse to relax its neck and drop its nose. The bosal should come in contact with the chin and nose without sliding up the face. If your bosal is too large lengthen the headstall so the bosal is in the correct position. The extra size can be removed by wrapping the mecate around the bosal above the heel knot until you have the correct size. The fiador (if used) must fit loosely enough that the heel knot of the bosal does not put pressure on the chin when there is no pressure on the reins.

The hackamore may be used for training the young horse before, or in place of the snaffle bit. It may be used for ground driving and early riding. Many horses are started in the hackamore, then are put into a bit when their training is more advanced.

Teaching a young horse to rein with a hackamore is the same as training with a snaffle bit. A direct rein and a bearing rein are used together. The horse will respond quickly. The nose is very sensitive to pain caused by pressure. The pressure is; lateral pressure (direct rein), direct pressure (even pressure from both reins), and lateral pressure on the neck from the reins.



Lateral Rein



Direct Rein

Once the horse responds to hackamore pressure, the pressure should be released. When training the horse, work towards having the horse obey with little or no pressure on the bosal. If the direct rein is used too much, the head and neck will have more lateral bend than the body.

Hackamore horses are not shown much past their fourth year. Three year olds are often shown in a hackamore in pleasure, reining, and cutting horse classes in futurities. Mature horses must be shown in a bridle.

#### Common Mistakes

1. Like a bit, the thicker, softer bosal is gentler than a thin, firm bosal. Thin, and light does not mean easier for the horse.



2. Bosal fits too loose. When rein pressure is used, it slides up the nose before it makes contact with the nose and chin groove.
3. Mechanical hackamore used in place of a bosal. It does not adjust the shape of the face. Pressure is severe. The mechanical hackamore can not be used in any show class, including the hackamore classes.
4. Using too much direct rein to turn the horse. The horse will turn its head and neck at a sharper angle than the body. The horse will not be able to do a balanced turn. Only enough direct rein should be applied for the horse to begin to respond. When the horse begins to move in the correct direction, release the pressure.
5. Stopping the horse in a bosal is similar to the turn. Pressure on the reins puts direct pressure on the nasal bone and chin. The rider should release the pressure as the horse begins to stop. The horse understands what is being asked and will balance itself.
6. Many riders keep steady pressure on the hackamore when they ride. Rein contact needs to be light to prevent constant pain to the nasal cartilage and chin.
7. Riders carrying their hands high encourages the horse to lift its head instead of dropping it.
8. Using one hand on the reins. Because a hackamore uses a direct rein, both hands need to be on the reins. This is the same as riding with a snaffle bit.

## OTHER TACK AND EQUIPMENT

When you are handling horses you use a variety of equipment. Some of the tack is helpful to the horse and some is used for training.

Saddle Blankets and Pads - These are standard equipment, if you ride with a saddle. You need them to; 1) protect the horses' back, 2) absorb moisture, 3) protect the saddle, 4) to compensate for saddles that do not fit well.

Blended Fiber Blankets - Coarsely woven blankets made of cotton or synthetic fiber. These do not absorb moisture well, and may wear out in a short time. Most are folded double when they are used. They are less expensive than other saddle blankets and pads, and are easy to wash.

Imitation Sheepskin Pads - These are popular at horse shows, but not practical for riding at home. Because these are synthetic fiber, they do not absorb moisture and are slow drying. This makes them harder to take care of. They are reasonably priced and come in many colors.

Felt Pads - These are tightly packed fiber. In order to last, they should have leather patches at the center front and in the cinch area. Cleaning is a problem because they need dry cleaning. If you try machine washing, they fall part.

Foam pads - These are generally covered with cloth, quilted and have leather patches on the stress points. They may or may not absorb moisture depending on the cloth cover. The horse gets good protection from the saddle with a foam pad. This is needed since most saddles do not fit the individual horse well. These are fairly easy to wash.

#### MISCELLANEOUS EQUIPMENT

Bell boots - A rubber circle that fits the horse from the pastern down over the hoof. They are worn on the front feet to protect the horse from stepping on their heels if they overreach. On jumping horses, they protect the foot area while jumping.

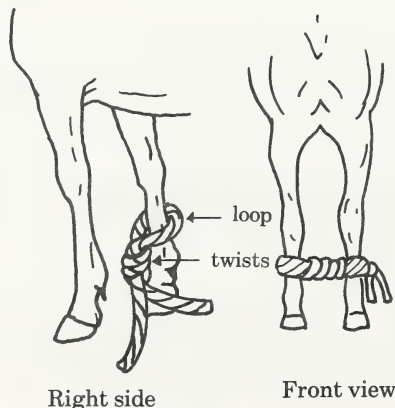
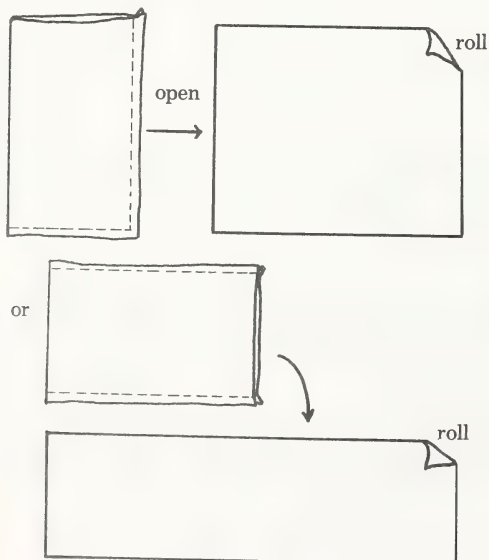
Cavesson noseband - Used with English bridles. Fits halfway up the face. Purpose is for attaching a standing martingale. Generally used on English show bridles.

Draw Reins - Long single rein with snaps at each end. 1) Snaps in the cinch area (side or below) goes through the bit on that side, 2) through the hands, 3) through the bit on the other side and 4) snaps in the cinch area. This pulls the nose down and in. The problem is, it is too harsh for most horses. Used with a snaffle bit.



Drop Noseband - Fits 5-6 cm ( $2\frac{1}{2}$ -3 inches) above the nostrils, over the bit. It is used to keep the horse's mouth shut.

Hobbles - Horses are often broken to hobbles when they are trained to ride. It is used to train the horse to stand or to graze outside a pasture without being tied. Horses that are used to them are also less likely to panic if they become tangled in wire or rope. Leather hobbles are common, but hobbles may be made from a burlap sack.



Hobbles can be made at home from a burlap sack ripped open or a special leather strap. If you are using a sack, roll it up from corner to corner. Loop it around one leg above the fetlock, twist the ends several times and loop the ends around the other leg above the fetlock. Tie it on the outside of the leg. This is safer if you are training your horse. Most hobbles fit around the pastern and it is possible to hurt the small bones in the pasterns if the horse fights them.

Leg Bandages - Knitted material wrapped around the legs for protection and support. Often used when trailering or over injuries.

Leg Wraps - Large foam backed sheet that is wrapped around the lower leg and over the coronet band. Used to protect the legs from injuries when trailering horses. These are not as good as leg bandages for moving horses a long distance because they do not support the leg.

Longe Line - A 8-10 meter (25-30 foot) rope or web strap used for longing or ground driving a horse.

Longing Cavesson - A type of halter with a firm, snug fitting noseband with three rings for attaching the longe line.

Neck Sweat - The size of this varies from a 12 cm (6 inch) wrap for the throatlatch to one that covers the whole neck. This is designed to make the horse sweat excess fat off of the area. They are generally stretch fabric on one side and rubber on the other, with velcro closings.

Running Martingale - Used to flex a horse's head and neck without hurting the nose. Used with a snaffle bit.

Side Reins - Strap on each side that attaches to the saddle and the bit. Teaches the horse to give in to the bit and flex over the poll and back. Used with a snaffle bit.

Skid Boots - Protect the fetlocks of the rear legs when a horse is doing sliding stops, roll backs and spins.

Splint Boots - Used on the front legs to protect the splint bone from accidentally being hit by the other front foot. This type of injury can happen when horses are playing, working in circles, or are being trained.

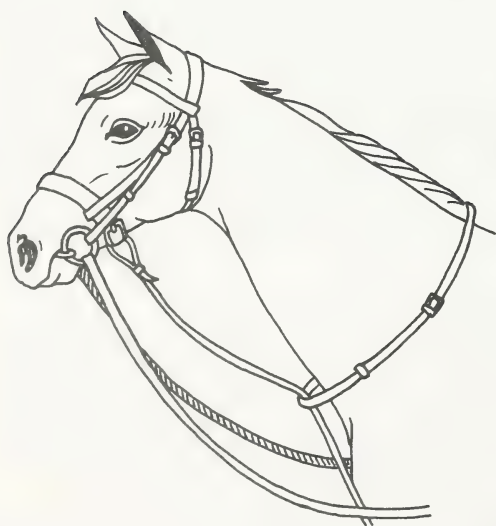
Standing Martingale - This is used for training. It keeps the horse from lifting its nose to get control of the bit. It is made up of two pieces. There is a headstall that snaps to strap attached to the cinch.

Tail Wraps - Made from knit or rubber backed material like the neck sweat or similar to a leg wrap. Tail bone is wrapped to protect the bone and tail hair from damage when you are trailering. When you are breeding a mare the tail should also be wrapped. A knitted leg wrap will also work.

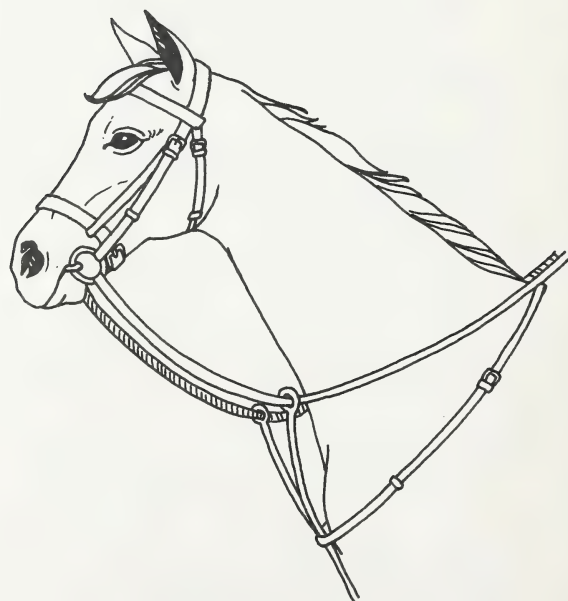




Longing Cavesson



Standing Martingale



Running Martingale

# HOOF CARE

## Importance of Hoof Care

The value of a horse depends on his ability to work. Therefore, four sound feet are indispensable. Oddly enough, foot troubles and the necessity for shoeing are largely man-made.

The wild horse seems to have been almost free from serious foot trouble. Problems began after the horse was domesticated. The horse was brought from soft pasture to hard roads; from self-regulated exercise to enforced work; from healthy pasture to filthy housing and from a light maintenance ration to the heavy diet necessary for work. Even the basically sound horse can break down. A horse with conformation defects is more likely to break down under these conditions.

The important points in the care of a horse's feet are to keep them clean and trim them so they retain proper shape and length. You should learn the parts of a horse's foot.

The feet of a horse should get daily care. Each day, clean the feet. This is very important if your horse has shoes. Use the hoof pick for cleaning. Work from the heel toward the toe. Be sure to clean out the depressions between frog and bars. While you are cleaning the feet, look for loose shoes and thrush.

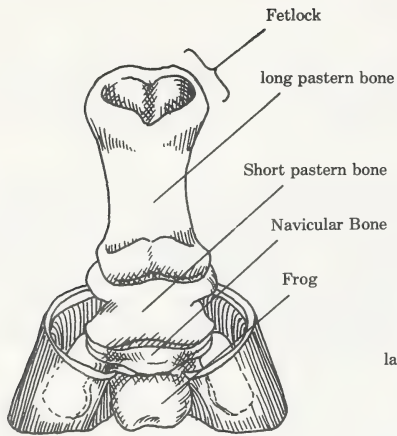
Thrush is a disease of the foot characterized by a pungent odor. Clean the crevices well around the frog. Thrush, a filthy disease, starts here. Look for dampness and a dark fluid oozing from the frog or sole. It can cause lameness and, if not treated, can be serious. Clean the sole and look for bruises, rocks, or nails. If you find these problems consult your veterinarian.

Hooves can become dry and brittle. Dry, brittle hooves can split and cause lameness. In dry hooves the frog loses its elasticity and is no longer effective as a shock absorber. If this isn't corrected, the frog will shrink and the heel contracts. To prevent this, keep the ground wet around the watering tank. If the hooves of a shod horse get too dry, wrap them with wet burlap sacks once or twice a week. After the hoof has absorbed enough moisture from the sacking, brush on a hoof dressing such as neat's-foot oil, sweet oil or linseed oil. Before each soaking with burlap, remove the oil.

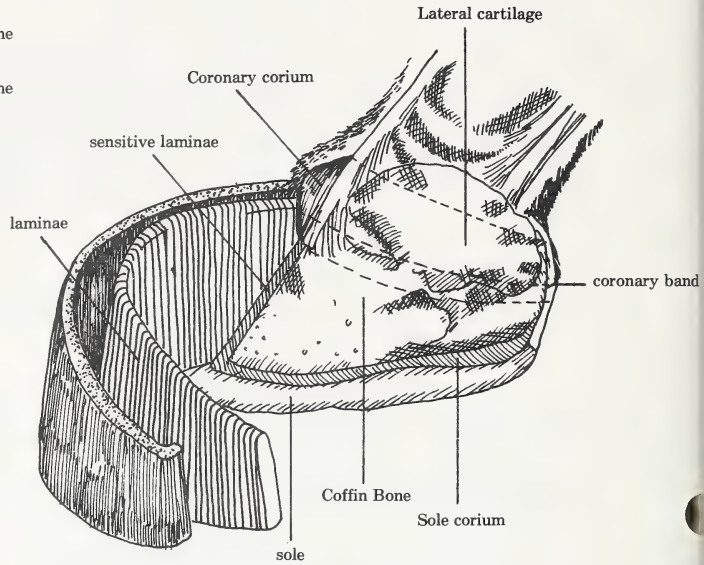
The feet should be trimmed so that the horse stands square and the hooves are at the same angle. This reduces strain on the tendons and helps prevent deformity, improper action and unsoundness.

The healthy hoof grows  $\frac{3}{8}$  to  $\frac{1}{2}$  inch per month. If the hoof is not trimmed, the wall will break off and will not wear evenly. Use nippers to trim off the horn. Level the wall with a rasp.

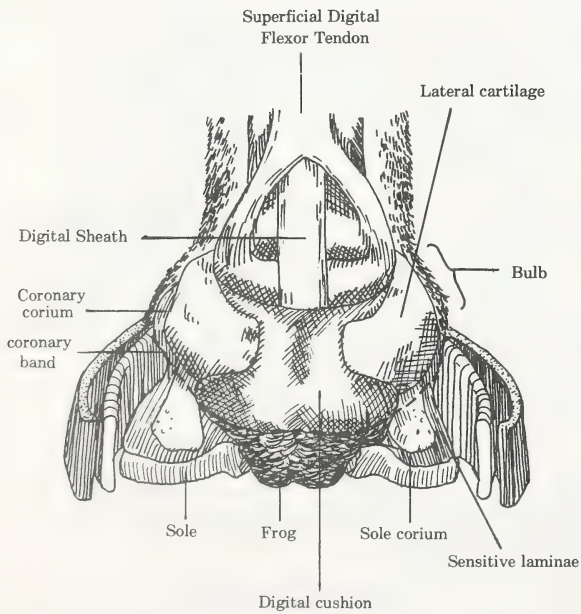
# Parts of the Foot



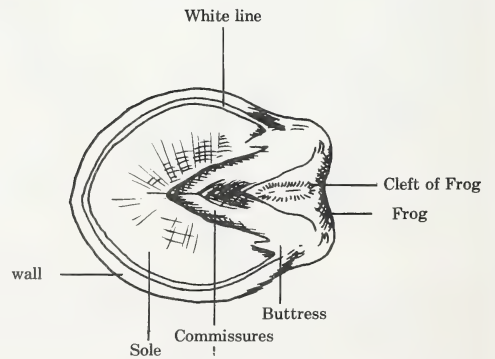
REAR VIEW



SIDE VIEW



REAR VIEW





## Desirable Conformational Features



Foot angle: No. 1 shows a properly balanced foot. The foot angle may be considered normal when hoof wall, A, and pastern, B, have the same direction. No. 2 indicates an untrimmed hoof with excess horn at the toe. No. 3 indicates an untrimmed hoof with excess horn at the heel. Dotted lines at ground surfaces show amount of horn to be removed to restore hoof angle.

Do not rasp the walls of the hoof. This removes the periople, a thin varnish-like outer layer from the hoof that prevents evaporation of moisture.

An unshaped hoof does not wear evenly, crooked legs may be helped or even corrected by regular trimming.

A foal may need its hooves trimmed. Check the feet every 4 to 6 weeks. Trim a small amount each time instead of a large amount at longer intervals.

### Reasons for Shoeing

A shoe does not make walking easier for a horse. The foot and leg are designed to minimize shock and road concussion. Shoeing only increases the hazards. Nail holes from attaching the shoe weakens the hoof wall and may provide an entry for disease organisms.

Wearing the same shoes too long can cause problems. Since the hoof wall grows perpendicular to the coronary band, the horse's base of support actually grows out from under him if shoes are left on too long. This puts more strain on the tendons.

Shoes protect the hoof from wear when an unusual amount of work is required. They give better traction on ice and mud. They help correct conformation problems and make it possible to ride an unsound horse. Shoes may be used to help cure disease or defective hooves (contracted heels, thrush, divided tendons). They also may be used to relieve pain from injured parts (hoof-wall cracks, bruised soles, tendonitis).

Poor hoof angle is caused by hooves growing too long either in toe or heel. The slope is considered correct when the toe of the hoof and the pastern have the same angle. If it is necessary to correct uneven hoof wear, correct gradually with several trimmings.

### Shoeing

Shoeing is done to protect the foot and correct problems. The following series of pictures were taken of a horse whose front shoe is being reset. The original shoe has been removed.



1. The angle of the hoof is measured.



2. The bottom of the hoof is rasped to give the correct angle.



3. The shoe is nailed into place.



4. The protruding ends of the nails are shortened.



5. The nail ends are bent down to secure them.

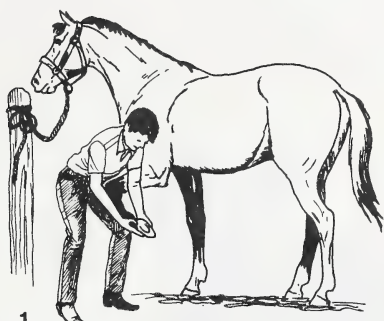


6. The outer wall of the hoof above the shoe and the nails are rasped.

Shoe horses that are used on hard surfaces to prevent the wall from wearing down to the sensitive tissues beneath. Shoes may be used to change gaits and action, correct faulty hoof structure or growth and protect the hoof itself from corns, contraction or cracks.

Shoeing always should be done by a thoroughly experienced farrier. Shoes should be made to fit the foot, not the foot to fit the shoe. Reshoe or reset at 4 to 6-week intervals. Shoes left on too long cause the hoofs to grow out of proportion. This may throw the horse off balance.

### Picking up the Feet



**1**  
Near Forefront: Slide your left hand down the cannon to the fetlock. Lean with your left shoulder against the horse's shoulder. Reverse for picking up the off forefront. When the horse shifts weight and relaxes on the foot pick it up.



**2**  
For a quick cleaning hold the hoof in your free hand. When shoeing or a long cleaning job it will help to place the horse's foreleg between your legs. Hold your knees together to help support the weight of the horse's leg.



**3**  
Near Hindfoot: Stand forward of the hindquarter and stroke with your right hand from the point of the hip down the hip and leg to the middle of the cannon. As you move the right hand down place the left hand on the hip and press to force the horse's weight to the opposite leg. Grasp the back of the cannon just above the fetlock and lift the foot forward.



**4**  
When the horse is settled move to the rear, keeping the leg straight and swing your left leg underneath the fetlock to help support the horse's leg. Never pull the foot to the side — your horse will resist. Reverse sides for picking up the off leg.

When you are picking up the feet. Start with the front left foot. Most horses are used to being handled from this side.

Pick up the front foot by rubbing the leg up high and by gently working down to the ankle. Brace your free hand against his shoulder to "push off" with in case you need to. If the horse will not lift his foot, squeeze the tendon behind the cannon bone with thumb and forefinger. Once the foot is up, get the horse to hold it in a position which is comfortable to him.

To pick up the hind feet, approach the horse from the front and place your left hand on his hip. In this way you can feel for tenseness of muscles as you run your right hand down the back of his leg to just above the ankle. If he resists, move more slowly.



Pull the foot forward in a continuous motion to about the height of your knee. As you do this gently push away with your left hand. If you are going to encounter resistance, it may come here. You can actually hang on to a hind foot with less danger than with a front one. Even so, don't permit yourself to get behind the horse in a struggle.

Without hesitation, step to the rear of the horse with your left foot, pulling the horse's leg straight behind. At the same time draw the hock up under your left arm. Position the foot on your knees and lock it in place with your left elbow and position your toes facing inward. With this procedure the foot is bottom up on your knees in position for cleaning.

Do not clean from the toe toward the heel. If the horse jerks his foot and the hoof pick from your hand, he can experience severe injury if he steps on it in this position. Clean the hoof from heel to toe.



#### Common Faults Corrected by Trimming

SPLAYFOOT (front toes turned out, heels turned in) - Can be helped or corrected by trimming the outer half of the foot.

PIGEON TOE (front toes turned in, heels turned out - opposite of splayfoot) - Can be helped or corrected by trimming the inner half of the foot more than the outer half.

QUARTER CRACK (vertical crack on the side of the hoof) - Usually can be corrected if the hoof is kept moist and the toes shortened.

CONTRACTED HEELS (close at heels) - Can be spread apart if the heels are lowered and the frog allowed to carry more of the animal's weight.

# JUDGING CONFORMATION

Judging horses is a learned skill. It is an evaluation of the body conformation, type, attitude, movement, condition, soundness, size and color. These points are weighed against what you consider the ideal horse.

In order to be a good judge you must know the parts of the horse and the terms used to describe them. Use any situation for practice. Do not wait for a workshop or contest as an excuse to learn.

In a formal judging contest you will be asked to compare each individual animal in a class with the other individual animals in the class and place each one in the order of your preference. In addition, with certain classes, you will be asked to explain why you selected each animal in the order you chose. This is called "giving reasons".

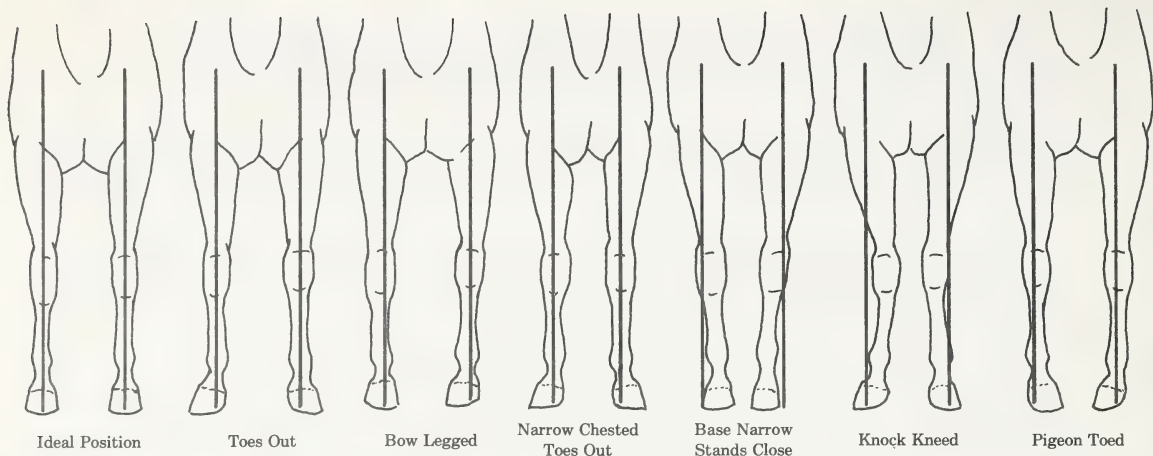
A definite judging method should be used to help you avoid overlooking any parts of the horse. Here is a common method to follow.

1. Stay back. Get an overall view of each horse. This is the general appearance. It includes symmetry and shape.
2. Move in closer. Always move quietly and steadily around horses. Divide the body into 3 main parts from the side; the front quarters, hindquarters, balance and symmetry.
3. Look at the head and neck and examine the points listed for the head and neck, and the front view of the forequarters.
4. Move to the near side and look at the forequarter, body and side view of the hindquarters.
5. Continue to a position the horse for a rear look at the hindquarters and legs. Stay back at a safe distance to avoid being kicked.
6. Move to the off side. Compare the body from this side.
7. When watching the horse travel, try to get directly in line with the horse to get a good view of the leg movement.

## Front Quarters

A view from the front. A vertical line from the point of the shoulder should fall in the centers of the knee, cannon bone, pastern, and foot. It divides the entire leg and foot into two equal halves.

In the ideal position the leg bones are centered above each other. It is common for bones to be off-side from each other or meet at other than 45° angles. Poor angles can cause structural weakness in the legs that can lead to unsoundness if the horse is heavily worked.

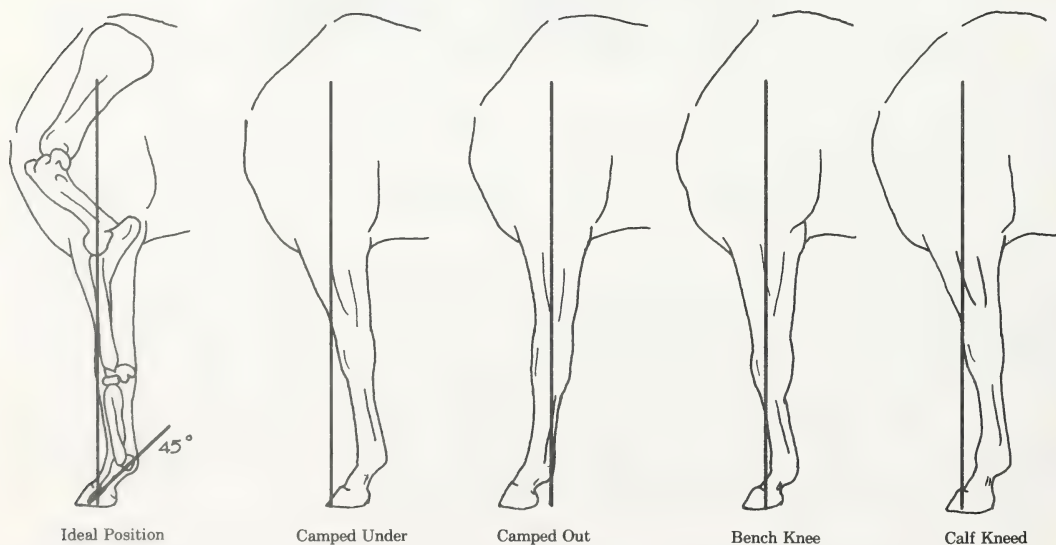


The most common leg faults are seen from the knee down. They may contribute to injuries to the leg such as splints and sidebone.

The foot itself should be large enough to support the horse. The front foot should be round (hind-foot is oval) with no cracks or horizontal ridges. The hoof wall should angle outward from the coronary band. The angle of the foot should be the same as the angle of the pastern and shoulder.

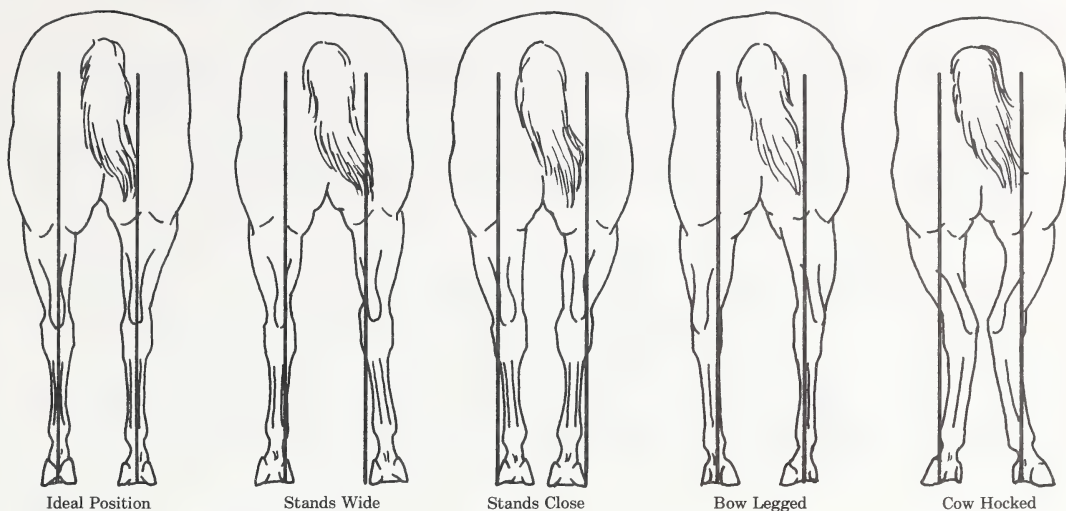
Viewing the front legs from a side view, a vertical line from the shoulder should fall through the center of the elbow joint and the center of the foot.

This angle affects how the weight of the horse is carried by the different leg joints.



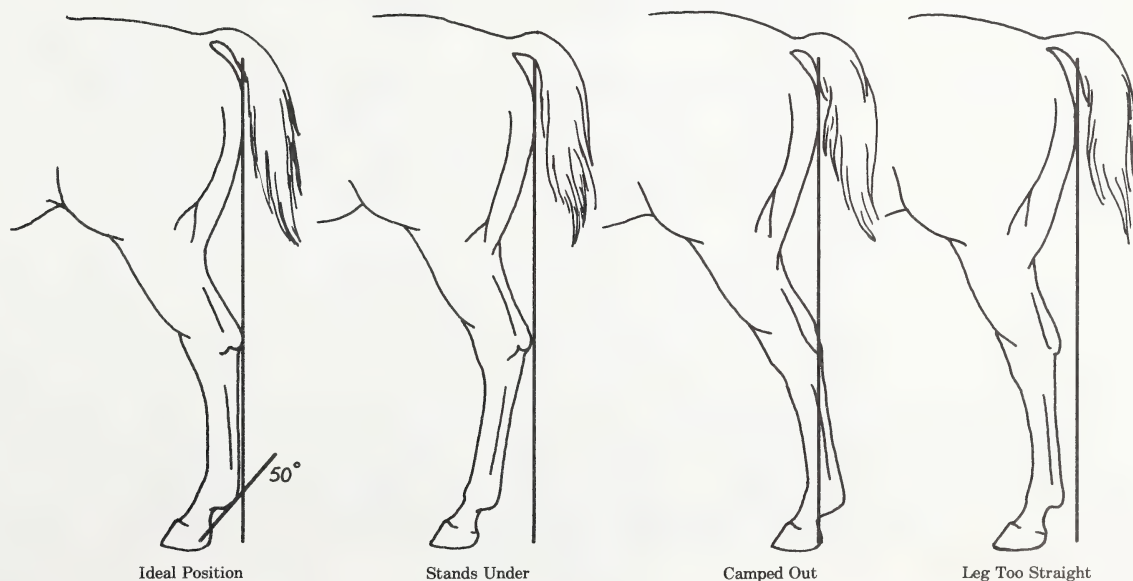


Looking at the hind legs from the rear, a vertical line from the point of the buttock should fall in the centers of the hock, cannon, pastern, and foot.



From the rear, muscling over the thigh, the inside of the gaskin and the outside of the gaskin is judged as well as the bone structure.

Viewing the back legs from the side, the vertical line from the point of the buttock should touch the rear edge of the cannon bone from the hock to the fetlock and meet the ground behind the heel.

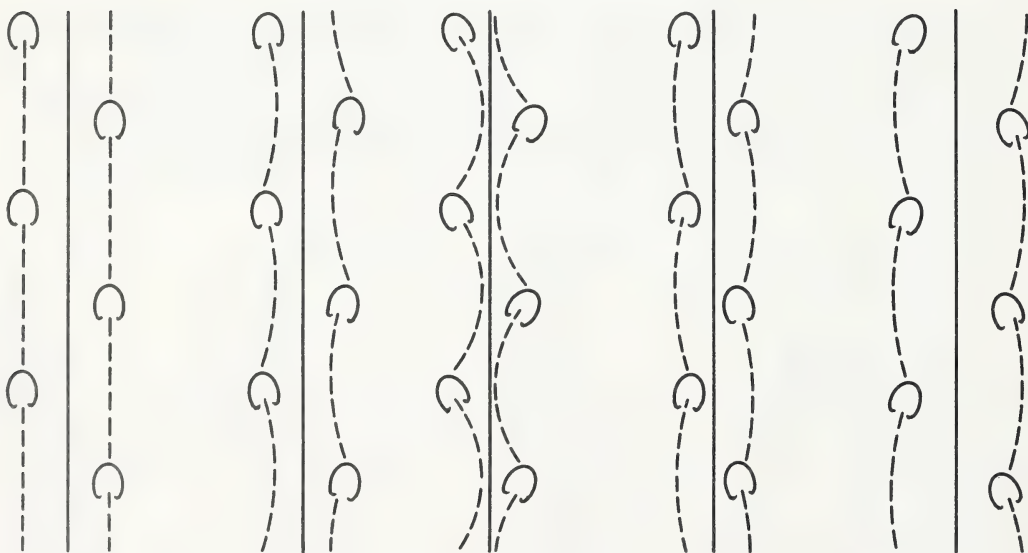


The alignment of the hind legs below the hindquarter affects how the horse carries its hocks under its body, and its stride. The forward reach or the drive off of the hocks will be affected. Some leg conformation will make quick stops difficult or uncomfortable for the horse.

After the quality of the body has been judged, watch the horse travel toward you, and away from you. The quality of the horse may appear similar, but the horses may travel differently. The ability of the exhibitor can affect the way the horse travels. For example a very short lead shank keeps the horse from travelling in a straight line by turning its head toward the handler and its hindquarters in the opposite direction.

Since few horses move perfectly straight, you must learn which movements may be unsafe. A horse that wings in is potentially more unsafe than one that wings out. It may trip itself. Some travel close, others travel wide. Learn to observe the difference and know how much value to place on what you see.

The following illustrations show the path of flight each foot will take as it is related to the structure of the foot and leg.



Normal foot  
moves in a  
straight  
line.

"Base-wide"  
feet move  
forward in  
inward arcs.

Path of the  
feet as seen  
from above  
splayed feet  
move inward  
in larger  
inward arcs.

"Base narrow"  
feet move  
forward in  
outward arcs.

"Pigeon-Toed"  
feet move  
forward in  
in wider out-  
ward arcs.

The following "Score Card" may be used when you begin judging to develop a standard for your evaluation.

# SCORE CARD FOR THE SADDLE HORSE

Scale of Points		Standard or Perfect Score
General Appearance - 12 percent		
1. Height . . . . .		
2. Weight . . . . .		
3. Form (Close but not full made, deep but not broad, symmetrical) . . . . .		4
4. Quality (Bone clean, dense, fine, yet indicating substance. Tendons and joints sharply defined, hide and hair fine; general refinement, finish) . . . . .		4
5. Temperament (Active, disposition good, intelligent). . . . .		4
Head and Neck - 8 percent		
6. Head (Size and dimension in proportion, clear-cut features, straight face line, wide angle in lower jaw) . . . . .		1
7. Muzzle (Fine, nostrils large, lips thin, trim, even) . . . . .		1
8. Eyes (Prominent orbit; large, full, bright, clear; lid thin, even curvature). . . . .		1
9. Forehead (Broad, full) . . . . .		1
10. Ears (Medium-size, pointed, set close, carried alert). . . . .		1
11. Neck (Long, supple, well crested, not carried too high, throatlatch well cut out, head well set on). . . . .		3
Forehand - 22 percent		
12. Shoulders (Very long, sloping, yet muscular) . . . . .		3
13. Arms (Short, muscular, carried well forward) . . . . .		1
14. Forearm (Long, broad, muscular) . . . . .		1
15. Knees (Straight, wide, deep, strongly supported) . . . . .		2
16. Cannons (Short, broad, flat, tendons sharply defined, set well back) . . . . .		2
17. Fetlocks (Wide, tendons well back, straight, well supported) . . . . .		2
18. Pasterns (Long, oblique - 45 degrees - smooth, strong) . . . . .		2
19. Feet (Large, round, uniform, straight, slope of wall parallel to slop of pastern, sole concave, bars strong, frog large, elastic, heels wide, full, one-third height of toe, horn dense, smooth, dark color). . . . .		5
20. Legs (Direction viewed from in front of a perpendicular line dropped from the point of the shoulder should divide the leg and foot into two lateral halves; viewed from the side, a perpendicular line dropped from the center of the shoulder blade should pass through the center of the elbow-joint and meet the ground at the center of the foot) . . . . .		4



Standard  
or  
Perfect  
Score

Scale of Points

Body - 12 percent

21. Withers (High, muscular, well finished at top, extending well into back) . . . . .	3
22. Chest (Medium-wide, deep) . . . . .	2
23. Ribs (Well sprung, long, close) . . . . .	2
24. Back (Short, straight, strong, broad) . . . . .	2
25. Loin (Short, Broad, muscular, strongly coupled) . . . . .	2
26. Flank (Deep, full, long, low underline) . . . . .	1

Hindquarters - 31 percent

27. Hips (Broad, round, smooth) . . . . .	2
28. Croup (Long, level, round, smooth) . . . . .	2
29. Tail (Set high, well carried) . . . . .	2
30. Thighs (Full, muscular) . . . . .	2
31. Stifles (Broad, full, muscular) . . . . .	2
32. Gaskins (Broad, muscular) . . . . .	2
33. Hocks (Straight, wide, point prominent, deep, clean cut, smooth, well supported) . . . . .	5
34. Cannons (Short, broad, flat, tendons sharply defined, set well back) . . . . .	2
35. Fetlocks (Wide, tendons well back, straight, well supported) . . . . .	2
36. Pasterns (Long, oblique - 50 degrees - smooth, strong). . .	2
37. Feet (Large, round - slightly less than in front - uniform, straight, slope of wall parallel to slope of pastern, sole concave, bars strong, frog large and elastic, heels wide, full, one-third height of the toe, horn dense, smooth, dark color) . . . . .	4
38. Legs (Direction viewed from the rear, a perpendicular line dropped from the point of the buttock should divide the leg and foot into lateral halves; viewed from the side, this same line should touch the point of the hock and meet the ground some little distance back of the heel; a perpendicular line dropped from the hipjoint should meet the ground near the center of the foot) . . . . .	4

Way of Going - 15 percent

39. Walk (Rapid, flat footed, in line) . . . . .	5-7
40. Trot (Free, straight, smooth, springy, going well off hocks, not extreme knee fold) . . . . .	5-7
41. Canter (Slow, collected, either lead, no cross canter). . .	0-5

TOTAL . . . . . 100

## GIVING REASONS

### Why Do You Give Reasons?

You give reasons to explain why you placed the class as you did. You want your reasons to be impressive, interesting, and sincere. You will want to present them in a pleasing and confident manner that is easily understood and easy to follow. Your reasons should be brief. Place emphasis on the big things. Again, the main objective of reasons is to let you tell why you placed the class as you did.

### Giving Reasons Will Help You To:

- Develop a system for analyzing a class of horses
- Think more clearly on your feet
- State your thoughts more clearly
- Improve your speaking poise and presentation
- Improve your voice
- Develop your memory

### How Good Are Your Reasons?

The judge will determine the value of your reasons by:

**ACCURACY** - You must tell the truth. This means that you need to see the main things in the class correctly. Accuracy is very important. Incorrect statements will cost you points.

**PRESENTATION AND DELIVERY** - Present your reasons in a logical, well-organized manner that is pleasant to hear, and clear and easy to follow. If reasons are poorly presented, the value of accuracy may be lost because most of what you say does not "get through" to the listener. Speak slowly and clearly in conversational tone. Speak loudly enough to be understood, but avoid speaking too rapidly. Use well-organized statements. Be sure to use correct grammar.

**COMPLETENESS** - Bring out all the major differences in your reasons. Omit small points that leave room for doubt.

**LENGTH** - A well-organized, properly delivered set of reasons should never be more than 2 minutes in length.

**TERMS** - Use correct terms. Incorrect terms detract from the value of your reasons. Study and use the terms in this manual.

**CRITICISM** - Avoid being too critical.

## Other Rules in Giving Reasons

Do not claim strong points for one animal unless he has them. Claim the points where one is superior, and then grant points of advantage to the other horse.

Emphasize the major differences. Present the main differences first on each pair.

Be specific and definite. Do not hunt for things to say. If you do not remember, go on to the next pair you are to discuss.

Say your reasons with confidence and without hesitation. Talk with enough vim and vigor to keep the judge interested, but do not yell or shout.

End your reasons strongly. Give a short final statement as to why you placed the last animal last, and end your reasons by repeating the placing of the class.

Be sure you have your reasons well organized, so you will not hesitate when you present them to the judge.

Stand 2-2.5 meters (6 to 8 feet) away from the judge as you give your reasons. Stand still and erect with your feet spread slightly apart, hands behind you, and look him straight in the eyes.

## Organizing Your Reasons

The organization of a set of reasons determined how easily the reasons may be followed. There are many different systems of organizing reasons. The system presented here is logical and clear, and may be used by anyone. Below, is listed the basic organization outline for an entire set of reasons, followed by comments on specific steps. (Placing of 1-2-3-4).

### Outline for a Set of Reasons

In giving reasons, a class of four animals is divided into three pairs; a top pair, a middle pair, and a bottom pair. So the basic outline for an entire set of reasons (for a placing of 1-2-3-4) is as follows:

1. Give name of class and how you place it.  
"I placed this class of (name of the class) (numbers of the horses you placed, in the order you placed them)

#### Top Pair

2. Reasons for placing 1 over 2, using comparative terms.
3. Grants for 2 over 1, pointing out advantages of 2 over 1. Use comparative terms.
4. Criticisms of 2. Comparative or Descriptive terms.

## Middle Pair

5. Reasons for placing 2 over 3.
6. Grants for 3 over 2.
7. Criticism of 3.

## Bottom Pair

8. Reasons for placing 3 over 4.
9. Grants for 4 over 3.
10. Criticisms of 4.
11. Repeat how you placed the class.  
"For these reasons I placed (number of the  
this class of (name of class) horses)

STEP 1 - Give the name of the class and how you placed it. For the purpose of this discussion let's assume we have a class of Welsh Pony mares placed 1-4-3-2.

STEP 2 - Reasons for placing 1 over 4. This should be done much the same as in a newspaper story - with the important general points first, followed by details to complete the story. In judging horses, examples of "general" terms are "typier", "larger", "heavier muscled", "higher quality", "more nicely balanced", and "more stylish". Differences in regard to these general factors should be mentioned in the lead statement, then details in the succeeding sentence or sentences. Example: "In my top pair I placed 1 over 2 because she is a typier, more nicely balanced mare that is more correct in her underpinning. She has a more-sloping shoulder, is sharper in her withers, more closely coupled and longer and leveler in her croup". Note above in the long sentence, that terms are divided by the words "more" and "that". This breaks up the continuous sequence of terms and makes the reasons easier to follow.

STEP 3 - Grants for 4 over 1. "I grant (or realize, or admit) that 4 is more stylish in her front, has a smaller more refined ear, and is cleaner in her throat".

STEP 4 - Criticisms of 4. "But I fault 4 because she is flat in her withers, short and steep in her croup, and is slightly sickle hocked".

The same procedure is used on the middle and bottom pairs. Notice in the example that complete sentences are used. Reasons must be made of sentences, rather than phrases. A basic principle to keep in mind is if something is not grammatically correct, it is not correct in a set of reasons.

## Do Not Use These Words and Phrases in Oral Reasons

There are, of course, differences of opinion regarding the use of some of these words and phrases in reasons. Several of those listed below are not considered objectionable by all people. However, each of them is considered undesirable by some people, and all of them can admittedly be replaced with better words and phrases. You will have a better set of reasons if you eliminate all of them.



- Animal or Individual. Instead, say "mare", "stallion", "gelding", "colt", or "filly".
- It. Use instead either "he" or "she".
- I would like to see. For example, instead of saying, "I would like to see 2 sharper in the withers", point out the fault directly: "I criticize 2 because he is mutton-withered".
- Lacks. This term should be used sparingly. Ordinarily, instead of saying an animal lacks something, it is more effective to directly point out the fault. For example, instead of saying, "I criticise 4 because she lacks depth", say "I criticize 4 because she is shallow".
- Kind of . . . ("mare", "colt", or "gelding"). For example, instead of "a better balanced kind of gelding", it should be a "better balanced gelding".
- Is a mare that is. For example, "1 is a mare that is typier". The phrase, "is a mare that is" only adds unnecessary words and emphasizes that 1 is a mare. Say instead, "1 is a typier mare".
- I placed number 1 gelding over number 2 gelding. Certainly the words "gelding" and "number" can be left out. It is sufficient to say, "I placed 1 over 2".
- I placed this class of Morgan Geldings in the order of 1-2-3-4. Leave out "in the order of" because the phrase adds nothing to the meaning.
- Leaving or left. For example: "I left 4 third because ..." Say "I placed 4 third because ..."
- I am placing. It is correct to say "I placed ..."
- I am criticising. Simply say "I criticize ..."

### Judging Terms

Following is a list of terms used in judging. You should select the most accurate and concise terms. The terms you use do not necessarily have to come from this list. The terms are not listed in any order of importance. For simplicity, they are presented in only one manner, but can be modified and used in a variety of ways. For example, the term "more stylish" can be used in at least three ways.

1. - 2 is more stylish about the front
2. - 2 is a more stylish front
3. - 2 is a more stylish fronted gelding

## GENERAL APPEARANCE

### Ideal

More breed characteristics  
More balance, symmetry  
Smooth muscled  
More stylish  
More quality  
Closer coupled  
Deeper bodied  
Bigger  
More rugged  
More size  
More compact  
Wider  
Deeper  
Thicker  
More substance (muscle and bone)  
Heavier muscled  
More uniform in body lines  
More even in body lines  
More balanced in conformation

### Fault

Lacks breed characteristics  
Lacks muscling  
Lacks smoothness of muscling  
Upstanding, leggy  
Plain, lacks quality  
Lacks substance  
Shallow bodied  
Upstanding  
Rangy  
Shallow  
Light-muscled  
Too fine in the bone  
Too light in the bone  
Rough  
Plain

## FRONT END

Cleaner cut about the head & throat  
Finer featured  
Longer necked  
More slope of shoulder  
More definition at the withers  
Finer at the withers  
Sharper at the withers  
Higher at the withers  
A more masculine front  
A more feminine front  
More refined head and neck

Coarse-headed  
Plain-headed  
Heavy-eared  
Coarse-eared  
Mule-eared  
Short-necked  
Heavy throatlatch  
Thick at the throatlatch  
Thick-withered  
Flat-withered  
Coarse at the withers  
Rounded at the withers  
Low at the withers  
Mutton withers  
Too straight in the shoulder  
Rough-shouldered  
Too straight in the neck  
Too straight from poll to withers  
Low-headed  
Low-fronted  
Plain about the front

## HEAD AND NECK

### Ideal

Shorter, more fox-like ear  
Larger, brighter eye  
More width between the eyes  
Sharper chiseled features  
Longer, trimmer, leaner, cleaner neck  
Clean throatlatch  
More refinement about the head

### Fault

Long, coarse ears  
Dull eye  
Poorly set eyes  
Coarse, plain head  
Thick throated  
Ewe necked  
Short thick neck  
Long ears  
Poorly set ears

## SHOULDER, ARM AND FOREARM

Longer more sloping shoulder  
Heavier muscled arm  
More powerful forearm  
Wider chest  
Smoother muscled arm and forearm

Steep shoulder  
Narrow chest  
Flat chest  
Lacking muscling in arms, forearm or chest

## BODY

Symmetrical  
Shorter top line  
Wider top line  
Stronger back  
Wider ribbed  
More arch of rib  
Stronger ribbed  
Stronger loined  
Stronger coupled  
Closer coupled  
Deeper flanked  
More muscle on the arms  
Longer, wider croup  
A nicer turn of croup  
Stronger in the stifles  
Thicker in the breeching  
Sharper over the withers  
Higher at the withers  
More prominent at the withers  
Shorter back  
Shorter coupling (kidney area)  
Stronger coupling  
Deeper heart girth  
Deeper-ribbed  
Greater spring of rib

Too long in the back  
Weak in the back  
Narrow at the loin  
Slack in the coupling  
Low in the coupling  
Long in the coupling  
High-hipped  
Plain-hipped  
Steep-rumped  
Steep in the croup  
Too short and steep in the croup  
Shallow-middled  
Light-middled  
Short-ribbed  
Needs back rib  
Too short in the back rib  
Hound-gutted  
Thick over the withers  
Low at the withers  
Long back  
Weak coupling  
Weak over the kidneys  
Shallow in the heart girth  
Shallow-ribbed  
Lacks spring of rib

## REAR QUARTERS

### Ideal

Longer croup (hip)  
More level croup  
Wider through the stifle  
Heavier-muscl'd thigh  
Heavier-muscl'd quarter  
Heavier-muscl'd gaskin, both inside  
and out  
More powerful driving muscle  
Longer smoother-muscl'd quarter  
and gaskin  
Heavier-muscl'd croup

### Fault

Short croup  
Steep croup  
Short, steep croup  
Lacks muscling through the thigh  
Lacks muscling through the quarter  
and gaskin  
Lacks width and muscling through  
the stifle  
Poorly muscl'd quarters  
Lacks muscle inside the gaskin  
Rough over the hip  
Low tail set

## UNDERPINNING

Shorter cannon  
Stronger pasterns  
More desirable slope to the pasterns  
Rounder foot  
Stronger foot  
More roomy foot  
Straighter legs  
Stands more correctly on the feet  
and legs  
Cleaner bone  
Higher quality bone  
Cleaner about the hocks  
Cleaner in the bone and joints  
Flatter bone  
Well-defined tendons  
Stands on a more correctly centered  
knee

High hocks  
Long cannon  
Weak pasterns  
Long, flat feet  
Narrow foot  
Brittle foot  
Stubby pastern (too short & straight)  
Stands too close at the hocks  
(cow-hocked)  
Stands too wide at the hocks  
Sickle-hocked  
Stands too close in front  
Knocked-kneed  
Toes in (pigeon-toed)  
Toes out (splay-footed)  
Over on the knees (buck-kneed)  
Back at the knees (calf-kneed)  
Puffy hocks  
Base narrow



## JUDGING CARDS

4-H-37		4-H JUDGING CARD									
1 Name .....	2 Age .....										
3 Club .....	4 Contestant's No. ....										
5 CLASS .....											
6 PLACING: First .....	Second .....	<table border="1"> <thead> <tr> <th colspan="2">SCORE</th> </tr> </thead> <tbody> <tr> <td>Placing .....</td> <td>.....</td> </tr> <tr> <td>Reasons .....</td> <td>.....</td> </tr> <tr> <td>Total .....</td> <td>.....</td> </tr> </tbody> </table>		SCORE		Placing .....	.....	Reasons .....	.....	Total .....	.....
SCORE											
Placing .....	.....										
Reasons .....	.....										
Total .....	.....										
Third .....	Fourth .....										
7 REASONS: (Be comparative and brief)											
<p style="text-align: center;">4-H Branch Alberta Agriculture</p>											

One of the most common faults at judging contests is that contestants do not fill out their "Judging Card" correctly. On the card areas 1-7 are to be filled out by the contestant. The "Score" box is filled out by the contest judges.

The spaces allowed next to "Placings" write the number of your choice next to each placing indicated.

In the "Reasons" space, give yourself room for rough notes on all of the horses. You may prefer to use the back of the Judging Card for this. Reasons should be written in three main paragraphs, with an introduction and a closing. Start your reasons with; "I placed this class of (name of class), (numbers of placing horses in order) for the following reasons."

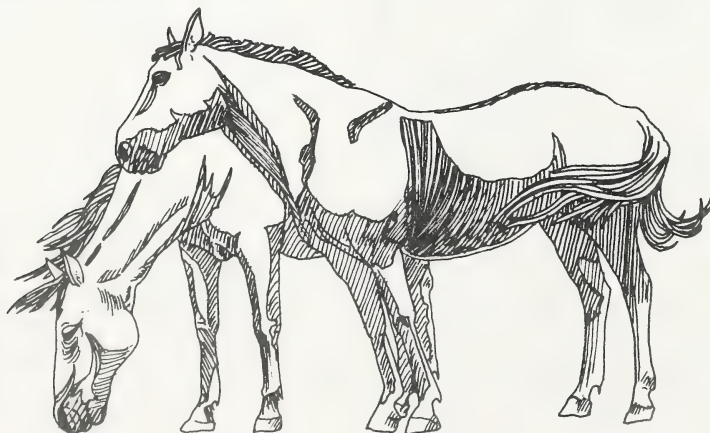
Paragraph 1 - a comparison of the 1st and 2nd place horses.

Paragraph 2 - a comparison of the 2nd and 3rd place horses.

Paragraph 3 - a comparison of the 3rd and 4th place horses.

Closing: "For these reasons I placed this class of (name of class), (numbers of placing horses in order) .

If there was an obvious quality difference between certain placings this can be pointed out, along with your reasons for it.



# LAMENESS

Good legs and feet are important to the soundness of horses. A majority of the common "unsoundnesses" are caused by changes in the leg and foot. A general understanding of leg unsoundness will help you recognize problems as a horse owner or judge.

## Anatomy of the Foot

The hoof is designed to take pressure and spread it out as the weight of the horse moves over it. The hoof wall is the outer portion. It is made up of three different layers. The outer layer (periople) begins 3 cm below the coronary band and covers the heels. The layer is covered with thin horny scales that reduce the evaporation of moisture from the hoof. Although the hoof appears hard and dry, it contains 25% moisture. The corium (middle layer) is the thickest. It contains the pigment that gives the hoof its color. The hoof will be the same color as the skin above it. The laminar layer is the inner layer. This layer carries most of the weight of the horse, with the laminae acting as shock absorbers.

The hoof wall is not an even thickness around the foot. It is thickest at the toe, and thins toward the heels. Because the wall is under pressure, it may be thicker near the ground surface, as it spreads.

Most farrier work is done on the hoof wall. If the wall gets too long it can contribute to foot problems by changing the pressure on the the foot of legs. In a long foot, the pressure is taken off of the frog and the heels can become contracted. Because the horse has to compensate for the length, there is a greater chance of tendon injuries and injuries from conformational weakness.

The white line is located between the hoof wall and the sole. It is only as deep as the inner layer of the sole.

The sole forms the bottom surface of the foot. The sole is not intended to support weight. If you look at the sole it should be concave from front to back, and side to side. The sole of the hind foot should be more concave than the sole of the foreleg. When the sole is flat, the horse has a greater chance of bruising the sole and becoming lame. Another common problem is corns that may develop on the sole between the hoof wall and bars. (The bars are where the hoof wall turns toward from the heel, parallel to the frog).

The frog is an elastic tissue that divides the sole into two equal halves. It should be large and well developed with no moisture showing. The frog distributes pressure as the horse moves. The frog normally sheds several times a year. The farrier will trim the frog down so that material does not get caught under its edges and cause thrush.

## Lameness

Lameness is defined as an indication of a structural or functional problem in one or more legs. It may be broken down into several main categories. These are;

1. Supporting Leg Lameness
2. Swinging Leg Lameness
3. Mixed Lameness
4. Complementary Lameness

A "Supporting Leg Lameness" is seen when the horse has its weight on the injured leg. The most common injuries are to the bone or motor nerves.

A "Swinging Leg Lameness" is seen when the horse is moving. The lameness is caused by changes in the joint capsules, muscles and tendons.

With the "Mixed Lameness" the horse appears lame on the leg when it is moving or standing.

The "Complementary Lameness" is a secondary lameness. If you have watched a lame horse, you will have noticed that the horse will shift the weight to other parts of the injured leg or a leg on the opposite side of the body. By trying to reduce the pressure on the injury, the horse can stress another leg or a sound portion of the injured leg. This can cause a second injury.

Lameness is usually seen in the forelegs. This is because they support 60-65% of the weight of the horse. The injury can occur from the shoulder, down. A lameness in the hind legs is uncommon. If a horse does develop a hind leg lameness, the injury is usually in the hock or stifle area.

Any lameness that has been present for more than one month may be considered chronic.

## Lamenesses

**ARTHRITIS** - Horses, like people, can develop arthritis. The problem usually appears as the horse ages. It can be a primary problem or secondary (develops at the point of an old injury). With arthritis, the joints enlarge as they become inflamed. As the disease progresses, the cartilage becomes discolored and small pieces can slowly break away.

**BRUISES** - Bruises on the sole of the foot are quite common. Horses with flat feet or thin soles are more likely to be injured. Bruises can be serious because they may be as deep as the coffin bone. A deep bruise may abscess. To ease the pain foot baths and poultices may help. Shoeing may also help by lifting the sole off of the ground, reducing pressure on the bruise. Shoeing with pads will protect the sole.

**BOG SPAVIN** – Bog spavin is a swelling of the joint capsule of the hock. You will generally see one swelling in front of the hock and two swellings at the back of the hock. The seriousness will depend upon the cause. It is only considered a serious blemish when it is caused by poor conformation (too straight a hock joint). In these cases, the bog spavin will appear when the horse goes into training. Lameness will be seen when there is heat, pain and swelling over the hock.

Bog spavin has several other causes. It may be caused by a mineral or calcium imbalance (important for young horses). Hard stops and turns with mature horses can also cause bog spavin. In this case there may also be injury to the bone.

The amount of swelling may vary. It is soft enough that applying pressure to one area will reduce the enlargement at that point and increase the swelling in the other areas. The horse will not show any signs of lameness unless the spavin is caused by an injury.

Not all cases of bog spavin can be treated. Only those caused by injury (bone chips) or nutrition can be treated to reduce the swelling. In some cases excess fluid can be drained.

**BOWED TENDON** – The simplest way to describe a bowed tendon is as a tendon that has been stretched so that it can not return to its original length and shape. When the horse has a bowed tendon you can see a bulge down the back of the leg behind the cannon bone above the fetlock.

The injury is usually found on the foreleg. It happens when the leading foreleg has all of the body weight on it as the horse lands or takes off during a canter/lope or gallop.

The most common cause is an overextension of the leg while the horse is being worked. Other factors that can cause this type of injury are:

- forced training procedure
- fatigue caused by speed and exertion
- toes that are too long
- improper shoeing
- long weak pasterns
- horses that are too heavy for their tendon structure
- Soft or slippery footing can increase the chances of an injury.

The horse has three major tendons that run down the back of the leg. These are the superficial flexor tendon, deep flexor tendon, and the suspensory ligament. Bowed tendon are strains to the superficial flexor tendon. This strain stretches the tendon by tearing the small fibers that make it up. If the fibers are stretched and torn there will be a dropping of the fetlock as well as the characteristic bulge seen in a bowed tendon.

The horse will go lame as soon as the injury takes place, or soon after. The first sign of injury is heat in the tendons. The horse may stand with its weight on the toe to reduce the pain caused by the heat and swelling.



A bowed tendon is a serious injury. Cold water and ice packs can reduce some of the swelling. The horse should receive immediate veterinary attention. Drugs are available that will reduce the pain and swelling. The veterinarian will decide the best way to treat the horse.

There are a number of problems after a tendon has been damaged. Because of its function the tendon is slightly elastic. In order to heal, fibrous scar tissue needs to form. It will not be the same quality as the original fiber. Calcification of the tendon can also occur. This causes the tendon to lose some of its elasticity. Other problems that can take place are:

- a lengthening of the tendon so that it will always be thickened
- as the fibers heal, they may attach themselves to the sheath that surrounds the tendon, or
- attachments may form between the deep and superficial flexor tendons. These changes make reinjury possible.

A bowed tendon takes a long time to heal. Even after veterinary treatment, the horse should not be put back into training. The horse should be rested for up to 12 months depending on how severe the injury is. In mild cases the horse may be lightly exercised with a support bandage on the leg. Sometimes firing or blistering is done, but the horse is not sound. Only the pain is removed. Shoeing is also possible. Shoes with a heel support should not be used for over 10 weeks. Any longer than this can cause a shortening of the tendons.

**CONTRACTED FEET** - A horse with contracted feet has a narrower foot than normal. The horse may not show any signs of lameness.

The problem may be caused by;

- a lack of frog pressure in a very long or improperly shod foot
- extreme dryness in the foot
- long toes
- bars and heels so low that they no longer support the weight of the horse

A number of changes take place in contracted feet. The foot becomes narrower at the heel as the frog dries and shrinks (recessed and atrophied) up against the sole of the foot. If the problem continues for a long time, the bars of the foot may touch each other.

Contracted feet are slowly corrected by trimming and shoeing. This may take a year or more.

**CRACKED HEEL - QUARTER CRACKS** - Cracks are common on the hoof. They can occur anywhere on the hoof surface, starting from the bottom of the hoof. Most of these are shallow cracks caused by dryness in the foot. The most common cause is damage to the outside layer of the hoof (periople) which normally prevents moisture from leaving the foot.

Proper care of the hoof will eliminate most cracks. This includes trimming and cross-rasping the crack. Some cracks do extend up to the coronary band, and may cause lameness.

CORNS - A corn is an injury to the sole of the foot generally caused by pressure. Common causes of corns are;

- pressure on the sole at the angle of the hoof wall and bars. This may be caused by shoeing too close at the quarters.
- lack of frog pressure (eg. contracted foot)
- over-reaching
- conformation faults such as a long weak fetlock and a narrow foot.

There are three types of corns a horse may get. They are the dry corn, moist corn and suppurating corn.

The dry corn is common. Unless it causes a lameness it may go unnoticed. It usually causes red or blue colored stains on the sole of the foot. It is generally found in the area of the bars. Proper trimming (and shoeing) of the foot that will help the foot spread as it makes contact with the ground will help. For corns near the toe, a protective pad on the bottom of the foot may be used.

A moist corn is caused by a severe injury to the sole.

A suppurating corn is a corn that has become infected. It may lead to the death of cells in some of the inner structures of the foot and lameness will be noticeable.

CURB - Curb is a swelling on the back of the hind leg below the hock. This swelling is caused by an inflammation (heat and swelling) and thickening of the plantar ligament. New bone growth may occur. Depending on the type of damage, a curb may not be permanent.

Curb may be due to conformation problems or an injury. Horses that have sickle hocks and are cow hocked are more likely to have curb, because of stress on the plantar ligament. Horses with normal conformation can get curb by violently attempting to straighten the hocks.

If a curb has been caused by an injury, treat the leg to reduce the swelling. It does not usually cause a lameness.

LAMINITIS - Laminitis or founder is a lameness caused by pressure on the laminae of the hoof. This happens when the laminae swell with blood in response to chemical changes in the body. Pressure increases because the outer layers of the hoof wall and the inner structures of the hoof are not able to provide room for the expanding laminae.

Laminitis has a large number of causes. These are;

1. Grain Founder - This is caused by the horse eating more grain than it is accustomed to. The feed may be due to an accidental excess (like getting into a grain bin) or the symptoms may suddenly

appear in a horse that has been eating a large amount of grain every day. The symptoms often do not show up for 12-18 hours after eating the grain. The symptoms are milder for oats than with other grains.

2. Water Founder - Cold water being consumed when the horse is hot.
3. Road Founder (Concussion) - This is more common in horses with thin walled and soled feet. Working a horse fast, or for a long time on a hard surface can cause road founder. The most problems are found in horses that are not physically conditioned before they are worked hard.
4. Grass Founder - Grass founder is common in overweight horses and ponies that are kept on pasture. The chance of founder is increased if the roughage mixture contains alfalfa and clovers.
5. After Foaling - The laminitis is a secondary reaction by the body. The mare will also have an infection caused by a retained placenta or a general uterine infection.
6. Secondary Infection - In some cases the horse will founder if they are extremely sick with a virus or a systemic infection.

Laminitis can occur in two main forms. It can be acute or chronic.

A horse with acute laminitis may have all four feet affected. If this happens, the horse may lie down for long periods of time to relieve the pressure. When the horse is standing it tries to reduce the amount of weight on its front legs. It does this by standing with its forelegs ahead of its body and the hind legs forward to support more weight. The front legs may be close together, and the weight will be on the heels.

Chronic laminitis is a long lasting case of laminitis (over one month). More deformities of the foot are noticeable. In most cases the sole of the foot drops and becomes flat, and the coffin bone is visible. Because of this, the horse travels so that it lands on its heels (normally the horse lands first on its toe). Heavy horizontal rings can be seen around the hoof because the coronary band has been affected. Without proper care, the toe can curl up as it grows longer.

Laminitis should be treated by a veterinarian. Treatment is more successful if the problem is recognized in its early stages. As the laminae swell, they produce heat over the hoof wall, sole and coronary band. The horse becomes less active and may drag its toes as it walks.

A major problem with laminitis is that it can cause structural changes in the foot. The hardness of the hoof wall prevents outward expansion of the laminae. Instead, the layer extends against the inner structure of the foot. The pressure pushes the front of the coffin bone down toward the sole. If this happens, the bone can be seen 10 days after the illness. Most veterinary and farrier care is done to try to prevent this.

In a severe case of laminitis the hoof wall may slough off.

In general, most cases of laminitis are treated with antihistamines. The antihistamines reduce the blood movement to the feet. This takes down the swelling temporarily.

Treatment of the horse is basically as follows;

1. Grain founder - This is usually discovered because it is an accident. Your veterinarian will use oil or drugs to clear the grain out of the digestive system. The horse will be given antihistamines. Because circulation is a problem the horse should be walked, and the legs will be helped by soaking the feet in hot water.
2. Water founder - Treat with antihistamines and care for the feet by proper trimming.
3. Road founder - The horse is treated with antihistamines and may need shoeing with pads to protect the foot.
4. Grass founder - The horse is treated with antihistamines. Like grain founder, the horse should be walked. The feed intake of the horse should be reduced for at least three days, and the horse fed dry hay or grass.
5. After foaling - The mare needs to be treated for the infection and laminitis. If laminitis occurs once at foaling, it is likely to occur each time the mare foals after that. Exercise is needed.

NAVICULAR - The term "navicular" refers to a condition due to conformation or injury that causes changes to the Navicular Bone. It begins as an inflammation between the deep flexor tendon and the navicular bone. In time the surface of the bone becomes pitted and the deep flexor tendon is destroyed.

Navicular is usually found in the front legs. It may occur in the hind legs because of a puncture wound. The cause may be conformation poor foot care or stress from heavy work. Hard ground will also contribute to the problem. Small feet are a common cause. Because of the small surface area, the pressure on the foot is greater. Pressure is increased by poor trimming and shoeing, and trimming the heels too low. Straight pasterns may also cause navicular.

The lameness disappears when the horse is rested. When the horse is worked it will go lame on both front feet, but will show more lameness in one foot. Horses with navicular will travel so they land on their toes. This wears the front of the foot down. The gait may look like a shuffle.

In time, the shape of the foot will change. The foot will contract to avoid frog pressure and the sole will become more concave. Fetlock injuries may develop as a result.



**PUNCTURE WOUNDS** - Puncture wounds are fairly common to horse kept in small areas, or ridden along the sides of roads. It is a puncture to the sole or frog of the foot. The most common causes are carpenter's nails and horseshoe nails. The wounds are often hard to find, but they will look like a black spot on the sole. A puncture to the frog is harder to find because of its color and texture. The location of the puncture will affect how the horse puts the foot down. In some cases the puncture wound will show up as a "supporting leg" lameness.

Puncture wounds may not drain on their own. If your horse has a puncture wound have your veterinarian open a drainage hole. The horse should also be treated for tetanus. The area must be kept clean. Use hydrogen peroxide and pack it with an iodine solution. Bandage the foot.

If a puncture wound goes unnoticed and an infection occurs, it will force its own drainage. Because the sole and hoof are hard, the infection will drain at the coronary band. This can cause other problems such as infectious laminitis and chronic laminitis, infection of the digital cushion, fracture of the navicular bone or tetanus. If there is drainage from the coronary band, soak the foot daily with water and epsom salts (or disinfectant). Wrap the area to keep it clean.

**RINGBONE** - Ringbone is an arthritic change in the pastern joint caused by the pulling of the ligaments, direct blows and wire cuts. This causes a build-up of bone around the joint. The injury will cause heat and pain. As it heals, the heat will disappear. The horse will travel like a horse with laminitis.

Ringbone is more common in horses with base narrow conformation, and horses with upright pasterns. It can occur in the front or hind legs.

**SIDEBONE** - Sidebone is caused by the calcification of ligaments on either side of the bone above the hoof. These will look like bony ridges. The problem is most common in base narrow horses. The horse may have lameness.

**SPLINTS** - Splints are usually described as a problem of young horses. It is an enlargement of the splint bone (below the knee). It is usually found on the inside of the front legs, but may also be found on the hind legs (unusual). It may be caused by hard training, poor leg conformation, poor nutrition or any type of stress. A swelling will form over the area, caused by calloused bone and ligament.

Splints may also be caused by a fracture of the splint bone. This can happen if the splint bone is hit by the opposite front foot. The bone can break anywhere along its length. Unlike splints from other causes, a fracture is not likely to heal. Because of this a large knot is always seen. The only treatment is to remove the bottom portion of the splint bone. This is only done if the fracture is causing a lameness.

A lameness will be most obvious at a trot or if the horse is worked on hard ground. Swelling at the location is always present. The amount of heat and pain will depend on how recent the injury is and the cause. In the case of the splint fracture, the amount of pain is affected by its location. Splints caused by stress may cause little or no pain. Many horses do have reoccurring splints that will appear with a small amount of stress to that area.

In early stages both types of splints will look the same. An X-ray is needed to find the cause.

**THRUSH** - Thrush is a fungus infection of the frog and sole of the foot. It can be seen around the frog. Thrush is caused by the glands that keep the frog moist overworking. This secretion breaks down and causes the odor. The area can get raw and painful causing lameness. In other cases a large part of the frog will peel off.

Thrush often is worse if rotting manure or bedding is not cleaned from the frog area. Overgrown frogs are more susceptible to thrush because material is harder to remove from the area.

To reduce the chances of thrush, clean the feet on a daily basis. If thrush is present soap and water can be used to wash the area. Bleach and Kopertox are used to disinfect the area.

**WINDPUFFS** - Windpuffs are a swelling of the joint capsule, tendon sheath or bursa in the fetlock area. It is usually seen in young horses that are in heavy training. It seldom causes lameness.



A. Windpuffs



B. Fracture



C. Splints



D. Quarter crack

# PSYCHOLOGY OF THE HORSE

To handle horses successfully, you need to understand the way they react to situations. This combines intelligence, instinct, emotions, the senses and training. Each horse is different.

Most behavior can be predicted because it is caused by the characteristics of the horse. Each horse has its own way of reacting.

## Instincts

Horses have instincts. An instinct is a behavior that is not taught. It is done automatically. Shying or running from an unknown object or sound is an instinct. It is important to the handler, because it can be dangerous. The horse can move so quickly to the side that it almost drops from under the rider. Some horses will spin around and bolt. An experienced rider can handle the situation and stop the horse. An inexperienced rider may be seriously hurt. To avoid these problems look ahead as you ride. This way you can tell if you may have a problem. Since the horse usually looks where the rider looks, stay relaxed and look ahead.



Horses can be shy creatures...

Fear of water is also an instinct. Few horses have had bad experiences, but they still do not trust water on the ground. Water keeps the horse from seeing the surface below. The horse can not tell if the footing is solid and even, or the depth of the water.

Through evolution, the horse became a herd animal. This provides the horse with a sense of safety (in numbers) and companionship. Unlike our herds of horses who are put together by our choice, the wild herd was a family unit. It was made up of a stallion, three or four mares and their off-spring. As the young horses matured they were forced to the outside or out of the group.

Changing the structure of the group, from a family unit to a group of unrelated horses has caused some new problems. Groups of domestic horse have a "pecking order". Horses earn their position in the group according to how aggressive they are. The amount of fighting depends on the disposition of the lead horse. Biting and kicking are common.

The pecking order in the herd is tested every time a new horse is brought in. Each horse in the group will fight with a new horse until its position in the group is accepted. A new horse may become the lead horse. Older horses are usually the most aggressive.

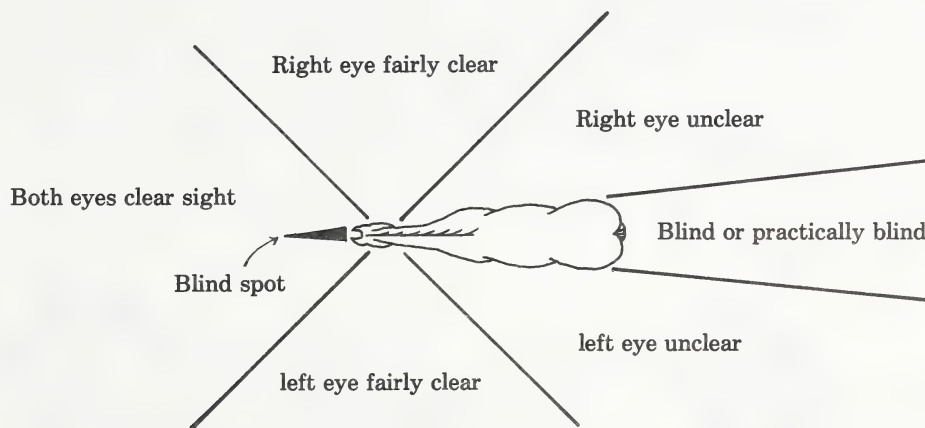
If you have a group of horses, be sure you know the pecking order. It will affect your safety. You may lead a dominant horse through the group with no problem, a timid horse may be attacked by other horses. A timid horse may bolt if any of the dominant horses come toward them. Also do not stand between a dominant horse and a timid horse or on the far side of the timid horse. You may get kicked accidentally or knocked over as the timid horse tries to escape. This is more important when you are feeding than at any other time. Dominant horses will move, forcing another horse away from the feed. If you must be among the horses when they are being fed be very careful. In some cases you may be more safe if you carry a long whip. You may need to use the whip if you have several very aggressive horses.

Because horses have a herd instinct, they will act alike in a group. This can be an advantage or disadvantage. Sports like horse racing and steeplechasing make use of the instinct to run in a group. The instinct to run as a group can also be a disadvantage. Almost everyone, has watched a group of horses run off when they have gone out to catch one horse.

### The Senses

All of the senses are important to the horse. This includes eyesight, smell, touch, hearing and taste. To the handler taste is the least important. A horse can not be bribed with food the way a dog can. Food treats can only be used to reward a correct response. This is only done in early training.

### The Eye



Understanding the eye of the horse explains how and why many horses react. We are interested in how well the horse can see, where it can see, and how it adjusts to changes in lighting.



Horses have many of the same eye problems as people. They may be far-sighted, short-sighted or have normal vision. Many reactions can not be explained any other way. For example, a horse may spook at familiar objects 5 meters (15 feet) away, but not react up close or at a long distance.

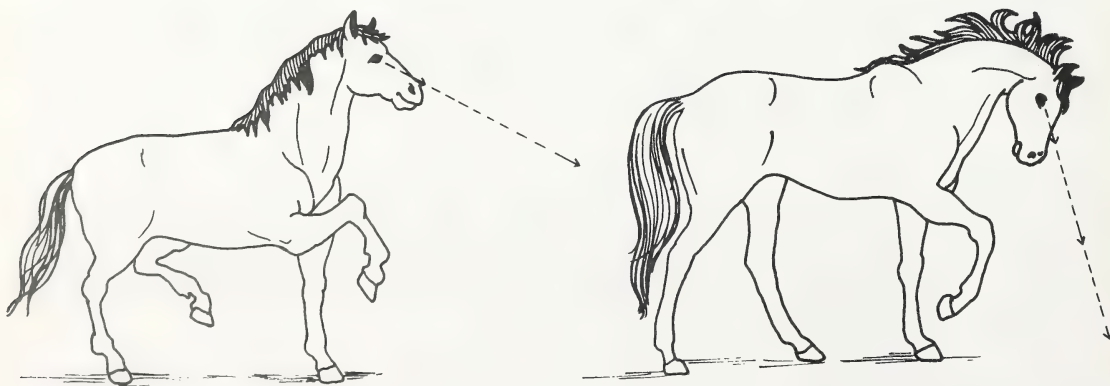
The location of the eyes makes it possible for the horse to see in front, to the side and behind without turning its head. The position of the eyes on the sides of the head is important. The further to the side the eyes are set, the poorer the forward vision is. This is why some horses will tilt their head to see an object directly in front of them (they can not move the eyes).

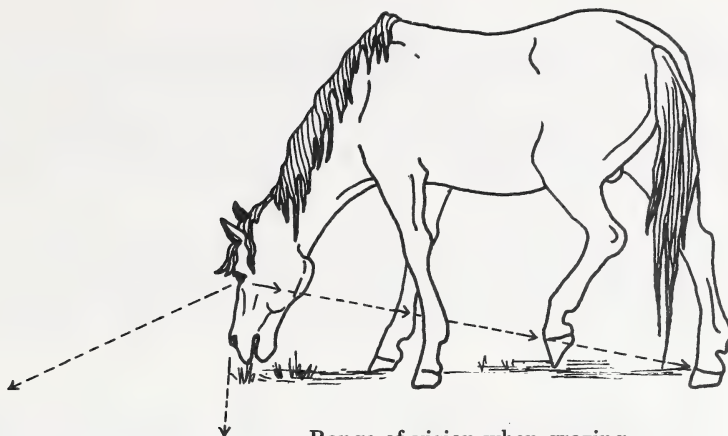
The eye position has some interesting effects. Most objects can only be seen out of one eye at a time. As you walk around the horse you will pop in and out of view. A nervous horse may react.

The range of vision of the horse is unusual. To the sides and back of the shoulder the horse can see movement, although at a distance it will not be clear. Objects can only be seen with one eye at a time.

Behind the body, there is a blind spot. The horse can not see anything located there. This is why it is not safe to approach a horse from directly behind.

The horse also has a blind spot in front of its body. The size of the blind spot is 1-1.8 meters (3-6 feet). This means that the horse can not see where it is placing its feet or feed placed in front of it. This vision has affected the way we train horses. By asking the horse to travel with its head perpendicular to the ground the blind spot moves closer to the chest of the horse. The horse can see where it is about to place its feet. This is why trail horses are asked to lower their heads as they come up to an obstacle before working it. With the head position changed, the horse is less likely to stumble.





Range of vision when grazing

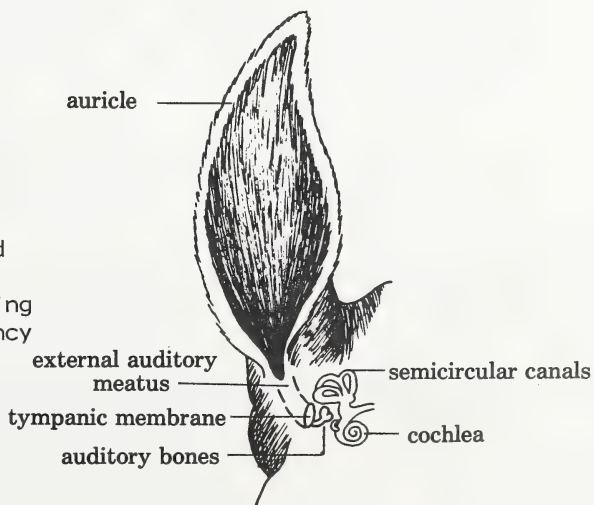
The height and position the head is held at affects the distance the horse can see. By lifting its head and holding the top of its face horizontally the horse can see up to 0.6 km (.25 miles). With the head down for grazing the horse may only see a few meters to the side of its body.

The eyesight of the horse is affected by moving objects. A horse is more likely to "spook" when something around it moves without warning. This is why some horses are afraid of small animals and blowing paper. This reaction is also why you are told not to run up to horses. Horses are often "spooky" on windy days because there are so many moving objects that they can not decide what is important. The reaction may be related to color, but it is not known whether vision is only black and white or if horses see some colors.

The eye of the horse does not adjust to light as quickly as our eyes. Sudden changes in light will blind the horse. Most horses will accept this if they trust their handler or are in a familiar place. The horse will obey the request once they are able to see. Most horses have good vision in dim light or darkness.

### Hearing

The ears of the horse are interesting. The part we call the ear is the auricle. It is cartilage covered with a flap of skin. Each ear can turn in a 180° arch to the front, side, and rear. Each ear can move independently. The horse has sharper hearing than we have, but the sound frequency they hear is like ours.



Parts of the ear

The hearing ability of the horse has made them popular with hunters. The horse is able to hear the game animals before they can be seen.

The hearing ability is not a problem. Sudden noises are more likely to upset a horse than a steady sound. If the horse is around sudden and loud noises it will get used to them.

Trainers use their voices when they are schooling horses. The horse responds to the tone and forcefulness of the voice. They may not recognize the words. This is why clucking and whistling work well as cues. The same command should always be used to get a certain response.

### Smell

Smell is well developed in the horse. The horse uses smell as much as sight to identify another horse, a person or an object. Let the horse smell anything that is strange to it.

Generally smell does not cause a major reaction and the horse will move on once it is satisfied. If the horse dislikes a smell it may blow hard through the nostrils or snort. A horse will often snort just before it shies from an unacceptable smelling object.

### Touch

As horse owners, we are interested in touching the horse or putting objects against the body of the horse. The most sensitive areas are the; mouth, feet, flanks, neck and shoulders. The mouth is only sensitive to pain. The other parts of the body are sensitive to pressure. The amount of pressure that needs to be used will depend upon the horse. It is affected by the thickness of the skin, the sensitivity of the nerve endings in the skin, and the experience of the horse.

Touch affects the whole body. Unlike the other senses, it can get tired. When this happens, the horse may not react to cues it knows. This can be caused by the rider. For example, a rider that does not stay still in the saddle can give the horse so many touch cues that the horse will not know what to do. The touch sense will get tired and the horse will not respond when a cue is given.

Training a horse to respond to touch is interesting. The horse can learn to act on a a very light touch with the reins or legs and shifting your weight in the saddle. Rider strength is not needed.

Reactions to leg pressure and weight shifts can be predicted. The horse moves away from leg pressure. This is why the rider will use an outside leg to cue for a turn, sidepass or canter/lope.

A horse will move to stay under the rider's center of gravity. The horse will move in the same direction as the rider's weight. You can help the horse travel in a straight line by shifting the weight on your pinbones. The canter/lope is easier for the horse to pick up correctly if

you shift your weight to the outside. The horse is able to swing its leading shoulder forward more easily because you have reduced the weight over it. Once this is learned the horse should only need to be touched with the outside leg after you shift your weight. You can also change the gait of the horse by moving ahead or behind their center of gravity. These changes may appear small to us, but the horse is sensitive enough to feel them.

Touch has many uses for the handler. In addition to riding cues, the horse can be cued from the ground. The horse can learn cues like a touch on the side to move over, on the nasal bone or forehead to lower the head and on the leg to lift a foot.

The body has other touch receptors. The hair of the horse is sensitive to touch. If you run your hand lightly across the tips of the hair, most horses will flinch. The horse also has long, coarse guard hairs on its jaw, muzzle, and around the eyes. They warn the horse about the distance they are from an object. This is important in poor light.

### Body Language

Horses can give us information about how they feel. This includes mood and health.

A horse will often give the same type of response when it feels good or is irritated, but the situations will be different. Look at the position of the ears, head and mouth. The ears should not be pinned back. The eyes will look calm and the lips may be relaxed or moving slightly. Often a horse will nod its head while you are grooming, or if it has made a correct response while you are riding. A well trained horse that enjoys being ridden will look pleased with itself. It is more enjoyable for the horse to do a skill correctly.

Body language is one of the fastest methods of finding out that a horse is sick. The behavior of the horse will change. A horse that normally comes to you may not come to you at all. A horse with stomach pains may look at its side, roll, stretch or lie down and refuse to stand. Recognizing that the horse is sick means the horse will be treated quickly.

### Learning

The horse's ability to learn is important to us as owners, trainers and handlers. Learning includes the way a horse acts with people and other horses, leading, riding and feeding.

Food preference is learned. The horse is sensitive to flavor, but develops a liking for certain feed because they have had it before. A horse may dislike a



**Food preference is learned.**

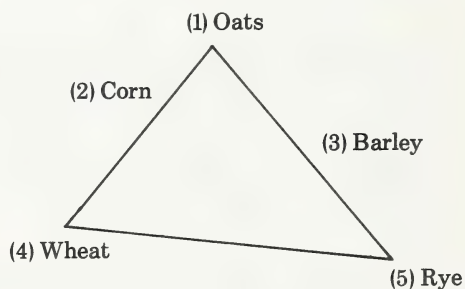


certain food because they did not feel well after eating. Palatability of forages is related to the texture of the feed. Grasses like bluegrass, bromegrass and fescue are eaten before wheatgrass and slough grasses. Most horses like alfalfa and clover, which are legumes. This preference makes the horse eat the forage it likes first. If you look at Table 3 - Composition of Roughages page 12 and 13 of Horse Nutrition you will notice that the forages the horse likes best are the most nutritious.

Table 3 — COMPOSITION OF ROUGHAGES  
(values based on 90% dry matter content)

Feedstuff	DE (Mcal/kg)		Crude Protein		Calcium		Phosphorus		Vitamin A activity*	
	Average	Range (%)	Average (%)	Digestible protein	Range (%)	Average (%)	Range (%)	Average (%)	Range (1000 I.U./kg)	Average (1000 I.U./kg)
<b>Legume hay:</b>										
Alfalfa	2.42	8-25	16.3	11.4	0.22-1.84	1.08	0.02-0.30	0.15	0-117	50.2
Clover hay*	2.15	10-18	14.0	9.8	0.75-1.07	0.91	0.08-0.32	0.20	—	23.8
<b>Grass hay:</b>										
All analysis	2.11	2-15	8.7	4.4	0.80-0.60	0.34	0.05-0.25	0.15	0-66	16.7
Bromegrass	2.11	3-28	12	6.0	—	0.40	—	0.20	0-88	—
Prairie	1.98	2-9	6	3.0	—	0.25	—	0.10	0-33	—
Marsh	1.94	8-12	10	5.0	—	0.30	—	0.10	0-33	—
Timothy	2.11	4-17	8	4.0	—	0.37	—	0.19	0-33	—
<b>Mixed hay:</b>										
Alfalfa-grass	2.24	6-18	11.9	6.5	0.04-1.88	0.86	0.08-0.24	0.16	0-29	12.3
Clover-grass	2.07	4-18	11.3	6.2	0.42-0.78	0.60	0.10-0.34	0.22	—	—
<b>Cereal hay:</b>										
All analysis	2.11	4-15	9.4	5.2	0.02-0.50	0.26	0.05-0.30	0.18	0-25	7.4
Oat	2.11	4-14	7	4.2	—	0.26	—	0.24	0-88	—
Barley	2.11	7-15	8	4.4	—	0.21	—	0.30	0-55	—
Wheat	2.11	5-9	7	3.9	—	0.12	—	0.16	0-55	—
<b>Straw:</b>										
All analysis	1.78	1-7	4.2	0.8	0.03-0.31	0.17	0-0.12	0.05	—	0.9
Oat	1.85	2-7	3	0.6	—	0.21	—	0.08	0-9	—
Barley	1.76	3-5	4	0.8	—	0.34	—	0.09	0-9	—
Wheat	1.76	1-7	3	0.6	—	0.15	—	0.06	0-9	—
Rye	1.76	2-8	3	0.6	—	0.28	—	0.10	0-9	—

Horses also learn to like various concentrate feeds. Grains that a horse will eat are oats, corn, barley, wheat, and rye. Most horses will eat oats. The other grains may only be eaten if there is no other feed available. Horses that have had a diet containing either corn or barley may refuse to eat the other because of taste differences. This table shows the preference for grains. Horses will eat wheat and rye if no other concentrate is available.



Preparation of feed affects flavor. If any changes are made the horse must learn to eat the feed. Changes may be as small as crushing the grain or making a warm mash out of a grain they are being fed. The horse may not eat the feed for several days. When you are changing the feed of the horse, do it gradually so the horse develops a taste for it.

Learning is affected by the mental and physical ability of the horse. The "smartness" of a horse is determined by how quickly a horse learns. It is not a measure of intelligence, because it is affected by the emotions of the horse. For example, a nervous horse will take longer to learn a skill than a quiet horse. The nervous horse has to learn to control its fears before it can respond to its handler. Age also affects learning. A young horse has as short an attention span as a small child. An older horse can work for a longer period of time, but is slower to learn new skills.

The environment of the horse is important to learning. This includes the level of nutrition, health care and handling the horse has had. A horse that has been well kept and properly handled learns more quickly than a horse that has had little care or handling.

For the horse to learn, the trainer needs to plan ahead. Simple skills should be taught first. As the horse learns, it can be taught more difficult skills based on the simple ones. Although the horse can not suddenly perform a difficult skill, it can apply the knowledge. For example, the horse can do a sliding stop with some speed after it has learned to do a balanced stop at a walk and trot.

When you are training a horse, rewards must be taught. The rewards are varied. It may be verbal or a pat. The horse may have learned these before it is trained to ride. After a horse has worked with speed for some time, stopping and resting is a reward. If the horse has been worked on the bit, riding with loose reins is rewarding. These rewards are good for all horses.

The reward-punishment system affects the learning of the horse. The handler must give the same response every time the horse responds. If the horse is punished for an incorrect response, it must be punished every time it does it. The punishment must be given immediately after the horse makes the mistake. If this is not done, the horse will not know why it is being punished. Learning will take place faster if every response of the horse is either rewarded or punished.

The length of time a horse is worked will depend upon the age of the horse and the amount of hard physical work you are doing. A young horse has a short attention span. It can not be worked for a long time at one skill. More can be taught in short daily lessons. The horse should only be worked until it gives a correct response to a new skill. An older horse can be expected to work for a longer period of time. The horse will be expected to respond correctly and immediately to cues it knows.

To teach a horse a skill, it must be repeated. Although the horse learns slowly, it has a good memory. The horse will respond to the stimulus for a long period of time. This makes proper handling of your horse important. Poor behavior is also learned.

Physical ability of the horse must be considered. Because of conformation, size and previous injuries a horse may be unable to perform certain skills. Not every horse has the athletic ability to jump, rein or do games, even if they have the learning ability.

Learning takes place for both the horse and rider. The longer you work with a horse, the easier it is to predict how your horse will respond. This will help you decide how to use your horse to the best of its ability.

# PREPARING HALTER HORSES

The way a horse is prepared for halter classes affects how they do in a show. A clean horse with a well cared for appearance does better in both halter and performance classes.

If you are planning to show your horse seriously, preparation starts months before. In general it takes a minimum of three months to get a horse in top halter or performance condition. This conditioning includes feeding, health care, grooming and exercise.

In Alberta most of the shows take place from April until October. For people showing their horse locally, most fairs and 4-H Achievement Days take place in July and August. All of the dates are available well in advance. Start preparing your horse so that it is in top condition then. Plan to start conditioning your horse three to four months before the first show. It takes this long to hit peak condition.

You should be concerned with the condition of your horse whether you are showing halter or performance classes. A well cared for, well prepared horse is more likely to attract the attention of the judge.

Horses in Halter classes are supposed to be judged on conformation. Despite this a top quality horse will not place unless it has been properly conditioned. A halter horse is expected to have more body fat than a horse shown in performance classes. This makes it difficult for the exhibitor to prepare a horse for both classes. It is difficult to feed enough to keep a horse fat when it is getting worked daily.

The following schedule for conditioning a halter horse may be used as is, or adjusted to meet the needs of you and your horse.

## Preconditioning

If your horse has been out during the winter, bring it into the yard or barn where it can be blanketed and fed separately from other horses. The horse should gradually be introduced to a high quality diet. Slowly increase the amount of grain per feeding, or if you are changing the type of concentrated feed, mix the two feeds until the horse gets used to it. Under normal conditions a horse should not need more than 2.5 gallons of concentrated feed per day. Changes in hay should also be done slowly. The better the quality of hay you are feeding, the less you should need to meet the requirements of your horse. Vitamin and mineral supplements should be fed, because horse feeds tend to be low in them. Salt should be fed on a free choice basis even if you are feeding a supplement that contains salt. Fresh clean water should be available. If watering must be done with a pail, clean it out daily.

There are other feeds and supplements that can be fed to a horse. Tallow or edible oils can be fed to improve the hair quality. As well as increasing the shine and softness of the coat, oils can help reduce skin problems that cause itching and increase the fat in the body for storage of fat soluble vitamins (A, D, E and K). Other common additions to the daily

ration are molasses, bran and alfalfa cubes. Molasses improves the palatability of feed and can encourage the horse to eat more feed. Bran is used to increase the amount of fiber and bulk in the diet. This stimulates the activity of the digestive tract. Some people feed alfalfa cubes instead of bulk hay to reduce the "guttiness" of the horses caused by a large volume of hay.

There are several other things that can be done to improve the horse's utilization of feed. One of the first is to deworm the horse. There are always a certain number present that rob your horse of its condition.

The second suggestion is to change your method of feeding. The horse evolved as a grazing animal that grazed periodically throughout the day. Because of this, their stomach does not have a large capacity and bulky feed passes through the body quickly. By feeding three or four times a day the feed will pass through the body more slowly. This allows for more complete digestion of the feed. Alternate your feedings of grain, and hay. A horse that is usually hard to put weight on may gain weight on less feed than it is currently getting. Unfortunately this method is not always possible for the horse owner.

Care of the coat needs to be started early. Blanketing the horse encourages it to shed out earlier and grow finer quality hair. Do not clip a horse in the spring to remove the winter hair. This can damage the hair tips of the summer coat and will ruin its shine for the summer. Adding oil to the diet and daily grooming improve the coat.

Grooming is particularly important because it stimulates the productivity of the oil glands in the skin. The oil is what gives the coat its shine. When you are brushing use short, firm, brisk strokes over the whole body. After brushing give the horse a vigorous rubdown with a clean cloth or towel.

Horses that are worked hard on a daily basis may need to be hosed or sponged off with water. Perspiration left on the skin and hair causes itching and dull hair. Do not use soap, because it removes the oil from the hair.

For good muscle development, the horse should be worked five days a week, for at least one half hour per session. The trot is the best gait for conditioning. If the horse is too young to be ridden it should be lunged or ponied from another horse. Performance horses should be worked as usual, with their working time increased to develop endurance. If possible work on soft ground.

Good farrier care should take place year round. As the show season approaches, you may need to decrease the time between visits. If your horse is heavily worked or worked on firm ground, have it shod. This reduces the wear on the hooves and can improve the action of the horse. Corrections for leg problems can be done but only gradually to prevent stress injury to the legs. Any farrier work should be done several days before the show in case the horse shows any sign of soreness.



## Show Preparation

Before you go to a show, there are a number of things that should be done to decrease the time it will take you to get ready.

1. Wash the horse several days before the show, so that the horse will have time to get oil on its hair. Rinse the horse well. If any soap is left behind, it can cause skin irritations and itching. A commercial coat dressing brushed through the hair, mane and tail will reduce the amount of dirt that sticks to it.
2. Do all of your clipping several days early so that irregular spots grow back in. Clip the bridle path, and shape it to the neck. Blend the bridle path into the neck hair. All of the long guard hairs on the face should be removed. Shorten any long hairs under the jaw.

The ears should be shaped around the edges (see "Grooming", Level I). The hair inside the ears should be shaped or shaved clean depending on where the horse is kept. Horses kept or ridden outdoors must have the hair left in the ears.

Shorten and shape long hair around the fetlocks and on the back of the cannon bone. Blend it into the other hair.

If your horse has white on its lower legs cleaning is easier if it is clipped short. Depending on how much you show, you may want to clip the hair very short (.5 cm or  $\frac{1}{4}$  inch). This makes washing easier and removes discolored hair. Blend the hair length where the white meets the body color.

Trim the hair in an even line around the coronary band.

3. The hoof wall is often irregular and discolored (particularly white or striped feet). Wash the hoof well, using a firm brush. Let the hoof dry. To smooth the hoof use a medium or coarse textured sandpaper, then finish the job with fine sandpaper. Do not use the sandpaper to remove any more of the hoof than is necessary. It is not a good practice to do this often, or use a rasp for this, because it removes the periople. The hoof can dry out, because the periople normally prevents the evaporation of moisture from the hoof wall.
4. Get a suitable halter. A good, clean well fitted halter with a matching shank will do. A halter with silver is not required for most levels of competition. If you are using a nylon web halter, use one that is not a bright color, and blends well with the horse. Loud colors detract from the horse. Do any cleaning on the halter and shank that is necessary.

## At The Show

There are many things that must be done before going into your class. The following is a list of things that are usually done. You will need to work out your own schedule. Depending on where you are showing some of the

steps may not be needed. If they need to be done, give yourself two hours per horse the first few times. Do as much as possible the day before the class.

1. Use a firm brush and scrub the hoof wall and sole clean with water. If you are going to put gloss on the hooves, let the hooves dry completely. Gloss will bubble as it dries if there is moisture on the hoof. Dark hoof gloss may be used on black hooves and clear on striped or white hooves. Black shoe polish on dark hooves and white polish on white hooves also gives a good shine.

If a gloss is used, scrub it off after the show. It is hard on the hoof.

2. Wash or rinse the white legs. Wrap them to keep them clean. If they are left uncovered they will pick up dirt before they dry.
3. Comb out the mane and tail. Dampen the tail hair to the end of the tailbone. Wrap this firmly so the tail hair will lie smoothly (stockhorse). The bottom of the tail may be braided.

This is not done for breeds that show with a full, natural tail.

A coat dressing may be applied to the tail now or later when it is applied to the body of the horse.

4. Brush the body of the horse thoroughly to remove the dust. Apply a coat dressing if you are using one. You may find it easier to put your coat dressing on a cloth to get it on evenly. Wipe the horse with a clean cloth to make the hair lie flat.
5. Wipe the face and ears with a dry cloth to remove the dust. Apply coat dressing using a cloth. Avoid the eyes, lips and nostrils.
6. Use a damp cloth to clean the nostrils, lips and the area around the anus.
7. Comb the coat dressing through the mane and forelock. Use water or hairspray to flatten hairs that are sticking up. On the professional circuits, exhibitors will use a crocheted net that fits smoothly over the top of the neck and attaches under the neck to flatten the mane.
8. Unwrap the legs and rub cornstarch or baby powder over the white area. Wipe the area to spread the powder evenly. Wipe the powder off of the hooves.

There are commercial whitening sprays available, but they usually go on thickly and look artificial.

9. Use a soft cloth to apply baby oil or vaseline around the eyes, muzzle and under the tail.



"You're supposed to be making a circle  
— not me!"

that does not listen well, a stud chain will help. A long whip is also needed.

### How to Use the Equipment

There are three ways to use a chain when you longe horses. First clip the chain on to the longe-line. The chain can be clipped at the bottom of the halter where the shank is attached. This works very well for a horse that tries to pull away with you or a horse that will not stop.

The chain can also go through the side rings and over or under the jaw. The amount of control with these will vary with your horse.

### Teaching a Horse to Longe

When you are teaching your horse to longe use a corral or small area where the horse can not run away. If this is not possible use bales or heavy poles to mark your circle. The first thing to teach the horse is to go around you.

It is easiest to teach the horse to go to the left. The shank is held in the left hand when the horse goes to the left (counter-clockwise). Hold it in your right hand when the horse is going to the right (clockwise).

# LONGEING

This is one way of exercising or training a horse. It can be used for horses that are too young to ride or for taking the edge off older horses before you ride. For training a young horse, it can be used to teach the horse verbal commands or balance.

### Equipment

To longe a horse you will need a strong halter or cavesson and a long rope or longe-line (nylon web is lighter to hold than rope). If you have a horse

"Today I'm gonna teach you all about longeing  
- I mean lunging...How 'bout trottin' around in a circle!"





To do this hold the line in one hand and whip in the other. Move back from the shoulder of the horse to its flank. Tap the horse on the hind-quarters with the butt end of the whip. Tell the horse to walk. Keep doing this until the horse moves around you without stopping. After the horse has gone around several time let it stop. Say "Whoa". Praise the horse for obeying. Change directions.



Do this every day until the horse walks around you easily, on at least 15 feet of line. Have the horse go in each direction. Make sure you stay opposite the flank of the horse, or the horse may stop and face you.

To teach the horse to trot, tap the horse with the end of the whip and say "trot", as "ta-rot". For "canter" say can-ter. This is done, because the horse understands the tone of your voice, not the words. Changing the tone of your voice helps the horse understand.

When teaching the horse to canter ask for change in gait from the trot. Use the whip to push for more speed.

Remember speak loudly, clearly and firmly when you want the horse to listen. Use the whip and longe line to reinforce the change of gait you want.

#### Chain Around Nose

1. Start on the left side. Run the chain through the ring at the bottom ring up the side of the jaw to the side ring.
2. Go through the side ring, over the nose and through the ring on the right side.
3. Clip to bottom ring of the halter.





### Chain Over the Nose

1. Snapped on right side, lunge horse to the left.



### Chain Under the Jaw

### Longing Cavesson



"This exercising your horse sure is tiring!"

# RIDING

## Objectives:

1. To improve riding skills practiced in Level I.
2. To define terms used in riding.
3. To improve the balance of your horse at a canter/lope.
4. To teach the horse to collect at a walk, trot/jog and canter/lope.
5. To shorten the time it takes for your horse to respond to cues.

## Method

In Level I you worked on your riding skills. Although you have learned the basics, you still need practice. Even the best riders will need some instruction to maintain the quality of their riding. With this you will begin to improve the skills of your horse.

New terms will be used at this level. Understanding them will make it possible for you to correct your horse, or teach a new skill.

## Terms

**Lateral Flex** - This is the ability of the horse to bend from nose to tail. The most flexible part of the spine is the neck. There is only limited flexibility along the length of the body from the withers to the tail.

**Longitudinal Flex** - The ability of the horse to bend its spine from the poll to the tail. The flexion required for advanced levels of training is a soft upward bend of the back and a bend at the poll and through the neck.

**Collection (Collected)** - Is the vertical control of the movement of the horse. The balance point for the weight of the horse is moved toward the hindquarters. This increases the up and down hock action, and encourages the horse to travel with its hocks further under the body. The movement lets the horse stride forward with its legs and limits the extension of the hocks behind the body.

**Strung out** - The opposite of collected. The weight of the horse is balanced near the front legs, and the forward extension of the hind leg is shorter than its extension behind the body.

**Impulsion** - Is a combination of the alertness of the horse and its action. It is related to the force the horse uses to move its legs up and down or the strength of the stride. For example the force used in a jog may be the same as at a brisk trot. The speed is not important, but knee, hock and pastern action is.

**Diagonal** - The diagonal is the stride the rider posts on at a trot. The rider moves up and forward in the saddle as the outside (rail side)

leg of the horse moves forward. The rider sits in the saddle as the outside leg extends below the body of the horse, or when the opposite front leg is extended.

Downward Transition - Slowing the horse to a distinct, new gait. The horse should make a quick, smooth change. The amount of collection and impulsion should not change. Head position should stay the same as the original gait and give no sign of resisting the bit.

Upward Transition - Increase in the speed the horse is travelling to a distinct, new gait. The horse should respond quickly and make a smooth change. Collection and impulsion should be the same as at the previous gait.

Above the bit - The horse travels with its neck stretched up and forward, and the head pushed forward.

Behind the bit - The horse pulls its head behind a line perpendicular to the ground. The jaw is held close to the chest to avoid contact with the bit.

On the bit - The horse carries its head in a vertical position over the bit. This is done with a rein carried in each hand. The horse is easier to control because the rider's hands are always in contact with the mouth.

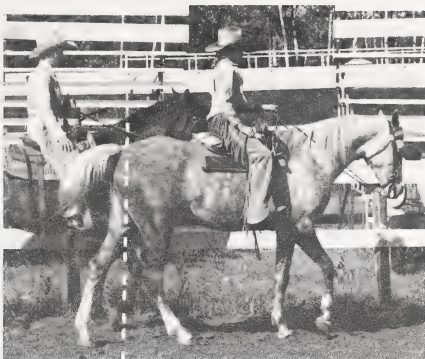
The other effects of the horse being on the bit is that the head and neck are raised, the balance point of the horse moves toward the hindquarters, the frame of the horse is shortened, the gait is slower, there is more front knee action and more impulsion from the hind legs.

Accepting the Bit - The horse travels with the front of the head slightly ahead of perpendicular to the ground. This controls the speed without the horse avoiding the bit. Some of the body weight is shifted toward the hindquarters, but less than when the horse is "on the bit".

Canter - A three beat gait with some speed. The horse is collected and works on the bit. The head and neck are carried above the natural position for the neck. This is done to lift the forequarters and help front leg action.

Lope - A slower three beat gait. The horse accepts the bit and travels on a rein with light contact. The head and neck are carried at a natural height. The hocks are not carried as far under the body as they are at a canter.

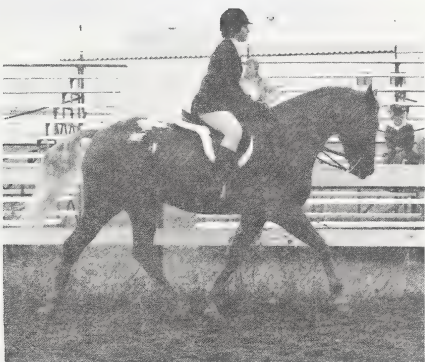




Collected relaxed walk. The stride length is even forward and back.



Uncollected trot. The horse is stiff through the poll, neck and back. Horse is travelling above the bit.

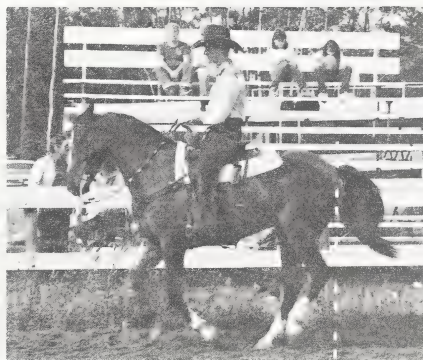


Collected working trot. The horse's topline has a soft bend, with no stiffnesses. The horse is accepting the bit and has an evenly extended stride.

Collection is determined by the way the body is carried and the stride of the horse. A horse that is collected will be relaxed and able to give the rider the action needed because it is better balanced.



Uncollected lope. The horse is stiff through the neck and back. The horse does not have its hocks below its body.



Collected lope. Hind legs are carried well under the hindquarters. The horse would carry its head lower if it relaxed its neck.





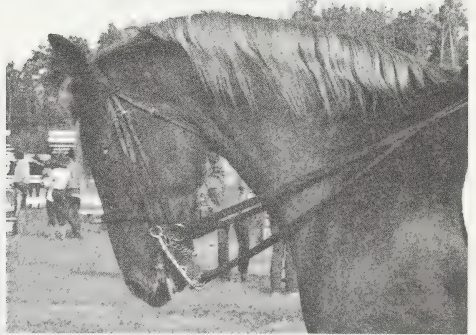
on the bit



accepting the bit



above the bit



behind the bit

## Training Aids

Saddle and blanket  
Bridle and snaffle bit with ring-type cheekpieces  
Halter  
Longe-line with a chain  
Longeing whip or buggy whip  
Side reins (see Winter Projects Book for Directions)

### Other Equipment:

Standing Martingale (only if necessary)

Optional - Splint boots

Cavesson

Biting Ring made up of:

- a headstall
- snaffle bit
- side reins
- surcingle
- longe line

Training aids are meant to help both horse and rider. While there is more equipment that can be used, this section will not go into its use. A problem with training aids is that they can cause more problems if they are not used correctly. The cost of some equipment does not make it practical unless you will be training horses as a career. This is why some equipment has been listed as optional. Although the equipment is good to have you can make equipment that works the same way.

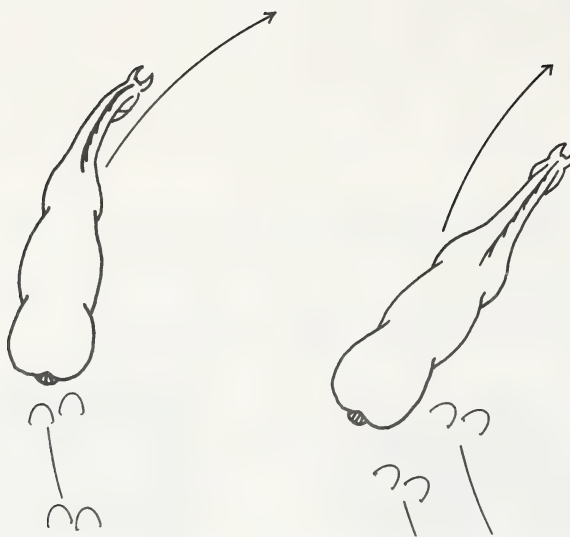
Training a horse to ride is not limited to the time you spend riding. Often you can get the same results by longeing your horse and correcting the faults from the ground.

Longeing is a good teaching method for any horse including older horses. It is used to teach:

- balance
- body flexibility
- verbal cues
- leg sequence at a canter
- setting the head
- collection

Teaching the horse this way is easier because you can see what the horse is doing and control it. Riding will be easier because the horse will learn to balance its body.

When you start training your horse, follow the directions in the longeing section. If you are longing the horse before you ride, saddle and bridle the horse as usual. Tie the stirrups together so they do not bang against the horse. Tie the reins so they can be set on the neck or saddle at a loose length. Put the halter on over or under the bridle. Hooking the longe line to the bit is hard on the mouth of the horse, because it causes uneven pressure and can cause an injury if the horse steps on the longe-line.



Balance and leg sequence are common problems for horses. Many horses "fall to the inside of the circle" when they travel in a circle or at an angle when going straight. What happens in the circle is the horse lowers its shoulder and swings its hindquarters to the outside of the circle. This makes the front legs and hind legs travel around the circle in two separate paths. If the horse is travelling correctly the tracks from the front and hind legs follow the same path. As the horse bends its body to the shape of the circle it will travel perpendicular to the ground.

The leg sequence is easier to teach from the ground. This includes picking up the correct lead and correcting a horse that crossfires or cross-canthers. Both of these can be difficult to correct when you are riding. Correct the horse by bringing it back to a trot, then ask for the canter again. By repeating this, the horse will learn that it is wrong, and will become easier to correct. With practice the horse will do the correction when it is being ridden when told.

### Collection

It is easiest to teach your horse to collect on the longe line. Working in a circle the horse will bend and reach under its body with its hind legs.

Collection and headset will be covered together. The two are hard to separate because they affect each other. To perform both skills the horse must use the full length of its body. It is possible to pull the head into position with the bend taking place at the poll. The body of the horse is carried stiffly and the back is more hollow than usual. If the bend is at the poll and the neck is slightly arched, the back of the horse will be rounded upward. This strengthens the back, and softens the way the horse travels. It also drops the hindquarters and brings the hocks forward under the body. The horse can travel in a collected manner when this occurs. When you watch a horse moving at a collected gait you will see that the forward extension of the hind leg is greater than its extension behind the body.

Early lessons are done on the longe line. For equipment you have a choice, but a snaffle bit and side reins are needed. Do not ride your horse the first few times the side reins are used because some horses will react violently. Sessions with the side reins should be short the first few times so that the horse does not get a stiff neck. This can happen, because new muscles are used to carry the head and neck this way. The natural headset of the horse is supported by a different set of muscles.

When you begin training, warm the horse up on the longe-line as usual, without attaching the side reins. This is done to relax the horse and get it moving forward at a steady rhythm. After this side reins can be attached. The side reins should eventually be short enough that the head is perpendicular to the ground and the neck is slightly flexed between the poll and withers. You may start with the head set ahead of the perpendicular if you are having problems getting the side reins short enough. Do not lead the horse after the side reins have been attached because the horse will be receiving opposite messages from your hands and the side reins. When you

start to longe the horse with the side reins attached you may need to use the whip to encourage the horse to move forward. Since side reins limit the movement of the head some horses will get upset. Problems such as rearing and backing up are not uncommon. In these cases the horse needs to be forced to move forward.

After the horse is used to the side reins, you can start to ride with them in place. This will change some of the things you do. You do not need to keep as firm a hold on a shorter rein because the head can not move. The reins will only be needed to turn the horse or lift the head if the horse is carrying it too low (or avoid pressure from the side reins).



The horse should not be asked to do any quick or sharp turns because the horse is not able to move its neck to balance for the turn. You will also be using more leg pressure to drive the hind legs of the horse under the body.

You may need to work your horse this way for a long time. When the horse carries its head in a reasonable position (below the 8 o'clock position) you can use a running martingale instead of the side reins. A standing martingale may be used for a very short time if the horse is lifting its head occasionally. Although this equipment is used by many people, it can work like a crutch. The horse will only keep its head down when the standing martingale is being used. It learns to keep its head down to avoid the pressure, not as an acceptance of the bit. It should not be used on a regular basis.

Collection takes time and practice for you and the horse. It is easier for you to work on collection rather than semi-collection, which is how western horses are shown in the ring. If you are showing at your achievement day or a horse show you will need to give your horse time to get used to working in a curb bit. Because the horse has learned to carry its head and body, you should get a nicely balanced horse with light contact on the bit.

### Transitions

A change of gait is required for pleasure riding and showing horses. A horse should change its gait either upward or downward without showing resistance in the body or with the bit. The head and body position should stay the same. Impulsion should be the same.

You should practice a variety of transitions. This includes variations in a gait as well as different orders. If you practice a standard set of transitions the horse will anticipate what you are going to ask.

Examples of transitions are: collected walk, walk, jog, working trot, extended trot, lope, collected canter, canter, extended canter, extended lope.

With practice you and your horse can learn many of these and do changes from them. The most common in the show ring are;

Western - walk, jog, lope, walk, reverse, repeat

English - walk, working trot, extended trot, walk, canter, walk, reverse, repeat

### Response Time

As you and your horse get more practice with weight shifts, you will be able to get a faster response to cues. A weight and rein aid will signal to your horse that a change is expected. By the time you use a leg aid, your horse will be prepared.

If you are planning to show your horse, you must expect a response within three strides. The horse must make the change without resistance. Resistance may be;

- tightening the jaw against the bit
- opening the mouth
- tossing the head
- charging forward for an upward transition
- refusing the cue

This will take time and patience to teach. In some cases, a whip may be used to reinforce a leg aid. Expect your horse to respond to a light leg aid after you have changed your upper body.

As you change speed upward the following cues may be taught;

Walk to trot - Lift the reins an inch or two to signal the horse, lean your rib cage forward slightly. Your hip and shoulder position will stay the same. Squeeze with your legs. If you are doing a rising trot, pick up the correct diagonal, then begin to rise. As you train the horse use the verbal command as well.

To a lope - The horse will pick up the lead with the correct hind leg, then the front leg. Aids can help the horse select the correct lead. To cue the horse shorten the reins slightly. Take your inside leg away from the girth and drop your weight down that hip. Tilt your shoulders back slightly (less than 2.5 cm or 1 inch). Move your outside leg back from the girth and bump the side of the horse with your lower leg. Use the verbal command at the same time.

Downward Transitions - Sit heavy in the saddle, then tip your pelvic bone back slightly. Use the reins as a pull and release. Your wrist movement should not be obvious. Do not use a steady pull on the reins, because the horse will tighten its jaw against rein pressure. This is done for fast stops as well, because it lets the horse balance its body more easily.

Turning - If you are neck reining or if you are only training your horse some guidelines should be followed.

1. To neck rein carry the reins in one hand so that the horse feels the pressure of the reins against its neck.
2. Do not use the reins to pull the horse around. The response should be to a light touch.
3. A reverse must be done over the hocks. If your horse does not stop over its hocks ask it to back one or two steps so it is balanced before asking for the turn.
4. Use leg pressure to cue the horse for the turn. While training, cue the horse with the reins that a change is coming before you touch the rein against the neck and bump with your outside leg (at the girth).

Backing - Many horses have problems backing because they do not know the leg order to use. A "back" is a trot (two-legged diagonal movement) in reverse. The head should stay in a flexed position, with the jaw relaxed. Practice backing toward an exit. Pull and release the reins for each step. If your horse is having problems work them from the ground first, or have a person on the ground slap the horse on the front knees to start the movement, apply pressure with a finger or blunt end of whip in horse's chest.



"Backing - is a movement of diagonal pairs in reverse".

## **SUGGESTIONS FOR PLANNING, PREPARING, AND PRESENTING HORSE DEMONSTRATIONS**

1. Decide on the general subject on which you would like to give a demonstration. Example: Horsemanship, showmanship, training, grooming, facilities, feeding, health, breeding, genetics, equipment, judging, records, handcrafts, etc.
2. Obtain materials from the Alberta Agriculture, breed publications, breed associations, library books, horse magazines, commercial publications, seminars, resource people (trainers, veterinarians, saddle shop operators, feedstore operators, stud farm managers, biology teachers), etc.
3. Decide on a specific topic. A demonstration is usually better if it is limited to one central idea or one principle that you want to teach others about. Example: How to Wrap a Horse's Tail, How to Wrap a Horse's Legs, How to Braid a Horse's Mane and Tail, How to Develop and Maintain a High Quality Hair Coat, etc.



4. The information that you have obtained plus your particular subject will usually give you ideas for a title and perhaps the way you would like to present the demonstration. Begin writing the demonstration with an outline first.
5. A demonstration outline should include the following:
 

Introduction and purpose	a. Tell what you are going to do. Examples: Show you how to wrap a horse's tail; Show you how to wrap a horse's legs; Demonstrate how to braid a horse's mane and tail, etc.
Main Body of Demonstration	b. Show and tell what you said you were going to do. Use illustrations to help teach, show and present your subject. Illustrations do not have to be fancy. Some can easily be made with poster board, marks-a-lots and letter stencils. If a live horse cannot be used, an appropriate model may help get the main points across.
Summary	c. Tell what you did - A poster listing the main points is effective.
6. Write the exact words you want to say and make small practice visuals of typing paper or newsprint.
7. Practice reading the demonstration and using practice visuals by yourself or with your team partner. You may want to practice in front of a mirror. Then practice in front of parents, leaders and/or agents. From your own observations and suggestions from your practice audience, revise your demonstration and visuals as is needed.
8. Memorize your demonstration and make or have someone help you make your visuals.
9. Practice! Practice! Practice! Ask all of your friends, family neighbours, fellow club members, etc., to be your audience.
10. Enjoy presenting your demonstration.

#### HORSE DEMONSTRATION - TOPICS BY SUBJECT

prepared by Dr. Doug Householder (January 1980)

##### Horsemanship

How to Bridle a Horse  
 How to Saddle a Horse  
 The Importance of Hands in Horsemanship  
 The Aids .... Application and Desired Responses  
 Position and Use of Hands, Body, Feet and Legs in Horsemanship  
 Horsemanship and Its Relation to All Performance Classes  
 How Your Horse Talks to You  
 Horsemanship for the Hunter Horseman



## Showmanship

- Teaching a Horse to Lead at Halter
- Teaching a Horse to Pivot at Halter
- Teaching a Horse to Set Up at Halter
- Showmanship to Fit Anyone's Rulebook

## Training (Basic)

- The Psychology Behind Horse Training
- How to Catch, Halter and Lead a Horse
- How, Where and When to Tie a Horse
- Teaching a Foal to Lead
- How to Teach a Horse to Longe
- The Procedure and Values of Ground Driving Horses
- How to Bit a Horse
- Flexion and Collection
- Lead Changes (Reining vs Western Riding)
- Procedures for Slowing Up the Fast Trotting Horse
- Rollbacks and How to Teach Them to Horses
- Teaching a Horse to Back
- Developing a Hard, Straight Stop on a Horse
- Teaching a Horse to Pivot and Spin
- Teaching a Horse to Sidepass
- How, When, Where and Why to Whip a Horse
- How to Break a Horse of Setting Back
- Vices and Their Prevention
- Teaching a Horse to Load and Unload

## Training (Specific Performance Events)

- Training the Western Pleasure Horse
- A Plan for Training the Two-Year-Old Western Pleasure Futurity Horse
- Tips on Running the Poles
- How to Save Seconds in a Tiedown Calf Roping
- How to Train the Cutting Horse
- Training the Jumping Horse
- Teaching the Trail Horse to Step Over Those Logs

## Breeding

- Artificial Lighting Regimes for Controlling Estrous in the Broodmare
- The Important Points of a Breeding Contract
- When and How to Tease a Mare
- How to Hobble a Mare for Breeding
- Practices to Follow at Foaling Time
- Care of the New Born Foal
- Problem Breeding Mares
- Managing the Broodmare During Late Gestation
- What I Learned in the Mare/Foal Project
- Artificial Insemination

## Genetics

- Horse Registration Papers and What They Say
- How to Trace a Horse's Pedigree
- Horse Colors and How to Differentiate Them

Evolution of the Horse  
History of the Appaloosa Horse  
History of the Morgan Horse  
Linebreeding in the Horse

### Equipment

How to Build Your Own Jump Course  
Measuring a Horse for His Equipment  
Tips on Purchasing the Right Saddle  
Adjusting Equipment to Fit a Horse  
Breaking in a New Saddle  
Renovation of the Used Saddle  
How to Clean and Preserve Leather  
When, Why and How to Use Draw Reins  
When, Why and How to Use Tiedowns  
How to Select the Right Horse Trailer  
A Horse Trailer Safety Check List  
Different Bits and Their Actions  
How to Care for Horse Clippers

### Judging and Selection

The Basic Steps in Judging Horses at Halter  
Parts of a Horse  
Conformation in Horses as it Relates to Athletic Ability  
Evaluating a Horse's Conformation on the Things That Count  
Selection of a Top Prospect for a Yearling Halter Futurity  
How to Age a Horse by His Teeth  
Use a Checklist Before Purchasing That Horse  
A System for Locating the Injured Area on a Lamé Horse  
Evaluating a Horse for Soundness  
Founder, Its Cause, Treatment and Prevention



# GLOSSARY

- ACTION - How a horse moves it's feet and legs as at walk, trot, etc.
- AIDS - Artificial: spurs, whips, martingales
- AIDS - Natural: the legs, hands, weight, and voice, as used in controlling a horse.
- ALTER - To castrate a horse, to geld.
- AMBLE - A slow, easy pace. The front and rear feet on a side move in unison.
- ANATOMY - The science of the structure of the animal body and the relation of its parts.
- ANGLE OF BIT - The outer angle at which the upper and lower incisors meet.
- APPALOOSA - A breed of horses.
- APPOINTMENTS - The tack and clothing a rider uses.
- ASTRINGENT - Drugs that cause contraction of infected areas, such as tannic acid, alum, and zinc oxide or sulphate.
- BACK - To step a horse backward.
- BALD-FACED - Face marked by wide white stripe from forehead to nose.
- BANDY LEGS - A horse pigeon-toed on his hind feet with the points of his hocks turned outward.
- BANGED TAIL - Hair of tail cut below the dock or bony part of the tail.
- BALANCE - The ability to change your center of gravity to suit the movement of the horse.
- BARREN MARE - A mare that is not in foal.
- BEARING REIN - Neck rein: Rein pushed against neck in direction of turn.
- BENCH-KNEED - Knees bent forward
- BIGHT OF THE REINS - The part of the reins passing between thumb and fingers and out the top of the hand.
- BITTING RIG - A combination of bridle, harness pad and crupper. Used to teach horse to flex at the poll.
- BLACK POINTS - Mane, tail, and legs black or darker than rest of horse.
- BLEMISH - Any mark or deformity that diminishes the beauty but does not affect usefulness.
- BLOOM - Usually refers to hair that is clean and glossy, denoting a healthy appearance.
- BOG SPAVIN - Soft swelling in or about hocks.
- BOSAL - That part of hackamore that fits over the nose.
- BOWED TENDON - A swelling of the tendons of the lower legs.
- BRAND - A mark of identification. A private registered mark burned on cheek, shoulder, or hip. A number burned on upper neck as in army horses. Temporary brands are made by burning a number on the hoof, or painting a mark on the skin with silver nitrate. Brands are now tattooed on inside of upper lip to avoid disfiguring body.
- BROOM TAIL - A western range horse. A poor, ill-kept horse of uncertain breed.
- BUGEYED - Eye protruding: Horse usually cannot see well.
- "BY" - Sired by.
- CALF-KNEED - Opposite of buck-kneed. Knees bent backward.
- CANINE TEETH - Teeth that appear in the interdental space on the male horse at 5 years of age. Sometimes referred to as tusches.

CANNON - The lower leg bone below knee and below hock.  
 CANTER - A three beat pace, slower than a gallop.  
 CANTLE - The back of a saddle.  
 CASTRATION - The removal of testicles from a male. A castrated male horse is a gelding.  
 CAVESON - A noseband on a bridle. A stiff noseband on a halter used with long strap in training.  
 CAVY - A collection of horses.  
 CAYUSE - A general term used to describe a horse of nondescript breeding.  
 CENTER FIRE - A western saddle with cinch hung from center.  
 CENTRALS - The first centrally located upper and lower incisors.  
 CHAPS - Seatless overalls made of leather, sometimes fur covered, for protection from cold.  
 CHESTNUTS - The horny growths on inside of a horse's leg, also called night eyes.  
 CINCH - A wide cord girth used on western saddles.  
 COARSE - Lacking refinement, rough, harsh appearance.  
 COB - A stylish, high-actioned horse used for driving and riding.  
 COLD-BLOODED - A horse with ancestry from the draft breeds.  
 COLLECTED - Controlled gait, a correct coordinated action.  
 COLT - A male horse less than four years of age.  
 COMBINATION HORSE - One used for saddle and driving.  
 CONFORMATION - Structure, form and symmetrical arrangement of parts as applied to a horse.  
 CONGENITAL - An abnormal condition that an animal possesses at birth, such as hernia.  
 CONTACT - The amount of pressure on the bit, affected by the headset of the horse.  
 COON FOOTED - Long, sloping pasterns throwing fetlocks low.  
 CORNERS - The corner incisors or those located back and adjacent to the forward edge of the third set of incisors.  
 CORONA - Saddle pad cut to fit shape of saddle, has a large colorful roll around edge.  
 COUPLING - Region of the lumbar vertebrae, loin, or space between last rib and hip.  
 COW-HOCKED - Hocks close together, feet wide apart.  
 CREST - Upper, curved part of neck, peculiar to stallions.  
 CRIBBERS - A bad habit of some horses in which the animal grasps the manger or other object with the incisor teeth, arches the neck, makes peculiar movements with the head, and swallows quantities of air. Called also crib-biting, wind-sucking or cribbing.  
 CRIOLLO - A breed of South American horses: A small, sturdy horse used as a cow pony.  
 CROP - A riding whip with a short straight stock and a loop.  
 CROSS - A dark stripe across the shoulders.  
 CROSS REINS - Method of holding single reins where reins overlap in hands across horse's neck.  
 CROUP - Part of the back just in front of base of tail.  
 CROW HOPS - Mild bucking motions  
 CROWN OF TOOTH - The top of a tooth protruding above the gum.  
 CUPS - The hollow space on the wearing surface of the incisor.  
 CRYPTORCHID - A male horse with one or both testicles retained in the body cavity instead of in the scrotum.



DAM - The female parent of a horse.  
DEFECT - Any mark or blemish that impairs usefulness; unsoundness.  
DENTAL STAR - A star shaped or circle like structure near the center of the wearing surface of the permanent incisors.  
DISMOUNT - To move from a saddled horse to the ground, or from the horse's back to the ground.  
DIAGONAL - The pair of legs that move forward at one time at a trot. Movement of a front leg and opposite hind leg. Important when posting at a trot.  
DOCKED - Bones of the tail cut in shortening the tail.  
DRESSAGE - Advanced exercises and training in horsemanship.  
DROPPED SOLE - Downward rotation of toe of coffin bone inside hoof due to chronic founder or laminitis.

ENTIRE - A stallion.  
EQUINE - Of or pertaining to a horse.  
EQUITATION - Art of riding horseback, horsemanship.  
ERGOT - A horny growth behind fetlock joint.  
EWE-NECKED - Top profile of neck concave like a female sheep's neck.

FARRIER - A horse shoer.  
FAR SIDE - The right side of a horse.  
FAVOR - To limp slightly.  
FENDERS - The wide pieces of leather along the stirrup leathers.  
FERAL - A wild horse. Has escaped from domestication and become wild, as contrasted to one originating in the wild.  
FIADOR - A special knot on hackamore, exerts pressure at rear of jaws.  
FILLY - Female horse less than four years of age.  
FISTULA - An abcess occurring in the region of the withers.  
FIVE-GAITED - A saddle horse trained to perform in five gaits: the walk, trot, canter, slow gait and rack.  
FLAME - A few white hairs in center of forehead.  
FLAT-FOOT - When the sole of the foot is not concave.  
FLAT RACE - A race without jumps.  
FOAL - A young horse of either sex up to yearling age.  
FLOATING - Filing of rough, irregular teeth to give a smoother grinding surface.  
FOREFOOTING - Roping an animal by the forefeet.  
FOREHAND - The front quarters of a horse: the forelegs, head, shoulder, and chest.  
FORGING - Striking the forefoot with the toe or the hindfoot.  
FOUNDER - Inflammation of the laminae of the foot causing lameness.  
FOX-TROT - A short-step gait, as when passing from walk to trot.  
FULL MOUTH - When the horse has a complete set of permanent incisors.

GAITS - The manner of going. The straight gaits are walk, trot, canter and gallop. Five-gaited horses walk, trot, canter, rack and do one of the slow gaits, running walk, fox trot, or stepping pace.  
GALLOP - A three-beat gait resembling the canter but faster, 12 miles per hour. The extended gallop may be a four-beat gait and is about 16 miles per hour.  
GASKIN - The muscular part of the hind leg above the hock.

GATHERING OF THE HORSE - Getting the horse's attention so he can gather his legs under him and be able to move readily.

GELD - To remove the testicles (castrate) a male horse.

GELDING - A male horse of any age with the testicles removed (castrated). Can not be used for breeding.

GESTATION PERIOD - The length of time for the development of the foal from time of breeding, usually about 11 months.

GET - The progeny of a stallion.

GIRTH - The measure of the circumference of a horse's body back of the withers. A leather, canvas, or corded piece around body of horse to hold saddle on.

GLASS EYE - Blue or whitish eye.

GO SHORT - To take short steps, indicative of lameness.

GOOSE-RUMPED - Have narrow, drooping rump.

GRADE - An animal, one of whose parents is a registered purebred and the other of unknown ancestry or containing some blood of the same breed as the purebred parent.

GREEN HORSE - One with little training.

GROOM - To remove dust and dirt from the horse using brushes and a cloth. Groom also refers to person who does this.

GOOD HANDS - The riders hands are in contact with the bit, but will still have some yield.

GYMKHANA - A program of games on horseback.

HACK - A horse ridden to a hunt meet, a pleasure riding horse.

HACKAMORE - A type of western headstall or bridle without a bit. Commonly used in breaking horses and teaching them to neck rein.

HAND - A measurement of the height of a horse. One hand equals 4 inches. For any measurements less than a hand use a decimal, then the number of inches (1 to 3) and any fraction of an inch written as a fraction.

HAW - A third eyelid or membrane in front of eye which removes foreign bodies from the eye.

HEAD SHY - Applied to a horse that is sensitive about the head, jerks away when touched.

HEAD STALL - The leather bridle straps exclusive of bit and reins.

HEIGHT - In horses is measured in hands from withers to the ground.

HERB BOUND - A horse who refuses to leave a group of other horses.

HIGH SCHOOL - Advanced training and exercise of the horse.

HOBBLE - Straps fastened to the front legs of a horse to prevent him from straying from camp.

HOGGED - Short cut mane.

HONDA - A ring of rope, rawhide, or metal on a lasso through which the loop slides.

HOOF - The foot as a whole in horses. The curved covering of horn over the foot.

HORSE - General term for an animal of the horse kind.

HORSE LENGTH - Eight feet, distance between horses in a column.

HORSEMANSHIP - Art of riding the horse and understanding his needs.

INCISOR - Slender teeth in front used for biting grass, feed, etc.

INTERDENTAL SPACE - The gum space between the incisor teeth and molar teeth.

INTERFERING - Striking fetlock or cannon with the opposite foot, most often done by base-narrow, toe-wide, or splay-footed horses.

JACK - A male donkey.

JANUARY 1 - At birth a foal, if a male-a colt foal, if female-a filly foal, both up to January 1 following birth, no matter when born a horse's age always changes on January 1 making it one year older.

JAUQUIMA - Spanish bridle: A hackamore.

JOCKEY - The leather flaps on the side of a saddle.

JOG - Slow collected trot required for Western classes.

LAMENESS - A defect detected when the animal favors the affected foot when standing. The load on the ailing foot in action is eased and a characteristic bobbing of the head occurs as the affected foot strikes the ground.

LAMINAE - The horny-grooved inside of the hoof.

LATERALS - The second set of incisors located between the central and corner incisors.

LEAD - The first stride of the canter.

LONGITUDINAL - Lengthwise. Parallel to the long part of the tooth.

LARIAT - A rope, often of rawhide, with running noose, used for catching cattle.

LEAD STRAP - A strap or rope attached to the halter for leading.

LIGHT HORSE - Any horse used primarily for riding or driving, all breeds except draft breeds.

LONGE OR LUNGE - A long line, about 20 or 30 feet, used in training and exercising or breaking a horse.

MARE - A mature female horse, over four years of age.

MARTINGALE - A strap running from the girth between front legs to the bridle. The standing martingale has rings through which the reins pass.

MAVERICH - An unbranded stray.

MECATE - A hackamore lead rope.

MELLOW HIDE - Soft, pliable, and easy to handle.

MOLARS - Rear teeth or grinding teeth of the horse generally not used to determine age.

MONORCHID - Male horse with only one testicle in the scrotum.

MOUNTING - To get on to the back of the horse with or without a saddle.

MULE - A cross between a jack donkey and a mare.

NEAR SIDE - The left side of a horse.

NEAT'S-FOOT - An oil made from suet, feet, and bones of cattle, used for softening leather.

NECK OF TOOTH - The part of the tooth between the crown and root located at the surface of the gums.

NECK REIN OR BEARING REIN - Rein laid against the side of neck in direction of turn.

OFF SIDE - Right side.

OPEN BEHIND - Hocks far apart, feet close together.

OVERO - A type of pinto, colors patched, often with a smeared appearance.

OUTFIT - The equipment of rancher or horseman.

OUTLAW - A horse that cannot be trained to ride or drive.

"OUT OF" - Means the same as "the dam off". Female parent of a foal.

PACE - A two-beat gait in which the legs on the side act together, thus the left front and the left hind foot move forward at same time.  
 PARROT MOUTH - The upper incisors overhang the lower incisors and do not properly meet and therefore cause uneven wear.  
 PALATABLE - Agreeable and pleasing to the taste.  
 PASSENGER - One who rides a horse without control, letting the horse go as he wishes.  
 PATHOLOGICAL - The diseased condition.  
 PAUNCHY - Too much belly.  
 PIEBALD - A horse of mixed colors, especially one having patches of black white.  
 PIGEON-TOED - Toes pointing in.  
 PINTO - Meaning painted, a mottled, piebald or calico pony.  
 PONY - Generally 14.2 hands or less in height.  
 POINTING - Standing with front leg extended more than normal--sign of lameness.  
 POLL - The top of a horse's head just back of the ears.  
 POLOCHAIN - A chin chain of flat, large links.  
 PORT - The part of the mouthpiece of a bit curving up over the tongue.  
 POSTING - At a trot the rider moves forward and up in time to the outside front leg of the horse.  
 POUNDING - Heavy contact with ground instead of light, springy movement.  
 PUDGY - Short and thickset.  
 PULL LEATHER - Holding to the saddle with hands while riding a bucking horse.  
 PULLED TAIL - Hairs of tail thinned by pulling.  
 PUREBRED - A horse with known ancestry from a definite breed and having no mixed heritage from other breeds.  
 QUALITY - Fineness of texture: Freedom from coarseness.  
 RACK - A fast, brilliant, flashy gait with a 1-2-3-4 beat, sometimes called the single-foot.  
 RAY - A dark line along the spine. Also called a dorsal stripe.  
 REATA - Braided rawhide rope.  
 REINS - Long narrow leather straps attached to the bit or bridle that are used by the handler to guide the horse while driving or riding the horse.  
 REGISTERED - Parents of the horse are of known breeding. This is recorded on paper and each horse has an assigned number.  
 REMUDA - A collection of saddle horses at a roundup from which are chosen those used for the day. A relay of mounts.  
 RIDGLING - A male horse that has retained one or both testicles in his body cavity.  
 ROACHED - A mane that has been clipped or shaved level with the neck. The mane is left natural at the forelock and withers.  
 ROLLING - Excessive lateral shoulder motion, characteristic of horses with protruding shoulders and wide chests.  
 ROWELS - The toothed wheels on spurs.  
 ROMAL - A long flexible quirt or whip attached to closed reins.  
 ROMEL REINS - A "Y" shaped set of reins with a single strap held by the rider.  
 RUBBERNECK - A horse with a very flexible neck, hard to rein.



RUNNING WALK - A four beat gait faster than a walk, often over 6 miles per hour.

RUNNING MARTINGALE - A "Y" shaped piece of training equipment that is attached to the girth of the saddle. There may be a single strap that fits around the base of the neck to hold it in place.

SACKING - To slap a horse with a sack, saddle blanket, or tarpaulin as a part of gentling and training.

SADDLE - A seat for the rider on horseback.

SCALPING - The hair line at top of hindfoot hits toe of forefoot as it breaks over.

SCALPING - Hitting the coronet of the hind foot against the toe of the front foot.

SHANK - That portion of the cheek of the bit from the mouthpiece down.

SHY - The horse will quickly swerve or change direction to avoid an object.

SICKLE-HOCKED - With a curved, crooked hock.

SIDE-WHEELER - A pacer that rolls that body sideways as he paces.

SINGLE-FOOT - A term formerly used to designate the rack.

SIRE - The male parent of a horse.

SLAB SIDED - Flat ribbed.

SNAFFLE - A bit with a ring type of cheekpiece and any type of mouthpiece.

SNAFFLE-KEY BIT - A snaffle with small metal pieces dangling from center used in training colts to the bit.

SNIP - A white streak on the nose.

SMOOTH MOUTH - Refers to the smooth biting surface of the upper and lower incisors after the cups have disappeared at 12 years of age or older.

SOUND - The horse has no defects, illnesses or blemishes that will reduce their usefulness.

SPAVIN - A small, abnormal enlargement on the inside of the hock caused by sprain or violent effort.

SPREAD - To stretch or pose.

SPEED CUTTING - The inside of diagonal fore and hind pastern make contact: sometimes seen in fast trotting horses.

STALLION - An uncastrated male horse 4 years of age or older. Usually used for breeding.

STAR - A white spot in the center of the forehead.

STARGRAZER - A horse that travels with the head held too high and the nose out.

STANDING MARTINGALE - Training equipment used to correct the headset of a horse. Attached to the girth and a nosepiece.

STEPPING PACE - A slow pace, one of the slow gaits.

STOCKINGS - White markings on lower part of legs.

STRIDE - The distance between prints of the same foot.

STUD - A place where stallions are kept for breeding. An uncastrated male horse used for breeding.

STRINGHALT - Excessive flexing of the hind legs, most easily detected when a horse is backed.

STYLISH - Having a pleasing, graceful, alert, general appearance.

SUNFISHER - A bucking horse that twists his body in the air.

SURCINGLE - A broad strap about the girth, to hold the blanket in place.

SYMMETRICAL - Proper balance or relationship of all parts.

TACK - Riding equipment or gear for the horse, such as saddles, bridles, etc.

TACK UP - To put on the saddle and bridle.

TAPADERA - Leather covering or shields over the front of stirrups.

THOROUGHBRED - A distinct breed of horse that is bred specifically for racing.

THREE-GAITED - A saddle horse trained to perform at the walk, trot and canter.

TRAPPY - A short, quick, choppy stride, a tendency of horses with short, straight pasterns and straight shoulders.

THRIFTY - Condition: Healthy, active, vigorous.

THROATLATCH - A bridle strap that buckles under the horse's jaw to keep the bridle from slipping over the horse's ears. The underside of the jaw where the neck and head join.

THRUSH - A fungus infection in the frog of the foot. Causes a strong smelling discharge.

TRAVERSE OR SIDE STEP - Lateral movement without forward or backward movement.

TREE - The wooden or metal frame of a saddle.

TROT - A 2 beat gait where diagonal legs are used, speed is about 8 miles per hour.

TUBING - Treating a horse for worms by using a tube directly to the stomach to add chemicals.

TUCKED UP - Thin and cut up in the flank like a greyhound.

TYPE - The ideal characteristics embodying all characteristics of a particular breed.

UNDERSHOT - Protruding under jaw.

UNSOUNDNESS - Any physical problem that affects the use of the horse. This may be a defect, blemish, injury or illness.

UTILITY - The use to which a horse is designated.

VETERINARIAN - One who is trained and skilled in the treating of disease and injuries of domestic animals.

VICE - An acquired habit that is annoying, or may interfere with the horse's usefulness, such as cribbing.

WALK - A slow, natural, flat-footed, 4-beat gait.

WALK-TROT HORSE - A three-gaited horse, walk, trot, canter.

WALLEYED - Iris of the eye of a light color.

WEAR - Refers to the amount of use or wear observed on the biting surface of the incisors.

WAR BRIDLE - An emergency bridle made of rope.

WINDING OR ROPE-WALKING - A twisting of the striding leg around in front of supporting leg, which results in contact like that of a rope-walking artist, often occurs in horses with very wide fronts.

WINGING - An exaggerated padding particularly noticeable in high-going horses.

# METRIC CONVERSION TABLE

Approximate Conversion to  
Metric Measures

SYMBOL	WHEN YOU KNOW	MULTIPLY BY	TO FIND	SYMBOL	BASE UNIT
--------	---------------	-------------	---------	--------	-----------

## MASS (weight)

oz.	ounces	28.349	grams	g	gram
lb.	pounds	0.454	kilograms	kg	
ton	short tons (2000 lbs)	0.907	tonnes	t	
g	grams	0.035	ounces	oz.	
t	tonnes (1000 kg)	1.102	short tons	ton	

## VOLUME

tsp.	teaspoons	5	millilitres	mL	litres
tbsp.	tablespoons	15	millilitres	mL	
fl.oz.	fluid ounces	28.413	millilitres	mL	
pt.	pints	0.568	litres	L	
qt.	quarts	1.137	litres	L	
gal.	gallons	4.546	litres	L	
bu.	bushels	36.370	litres	L	
mL	millilitres	0.035	fluid ounces	fl.oz.	
L	litres	1.760	pints	pt.	
L	litres	0.880	quarts	qt.	
L	litres	0.220	gallons	gal.	
L	litres	0.027	bushels	bu.	

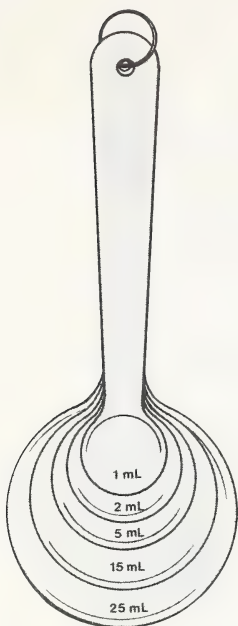
## LENGTH

in.	inches	2.540	centimetres	cm	metre
ft.	feet	0.305	metres	m	
yd.	yards	0.914	metres	m	
mi.	miles	1.609	kilometres	km	
mm	millimetres	0.0394	inches	in.	

cm	centimetres	0.394	inches	in.	
m	metres	3.281	feet	ft.	
m	metres	1.094	yards	yd.	
km	kilometres	0.621	miles	mi.	

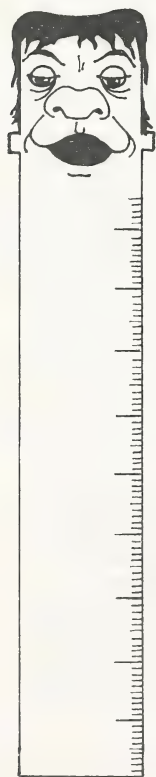
## ENERGY

kcal	kilocalorie	4.186	kilojoules	kJ	joule
kJ	kilojoules	0.239	kilocaleries	kcal	

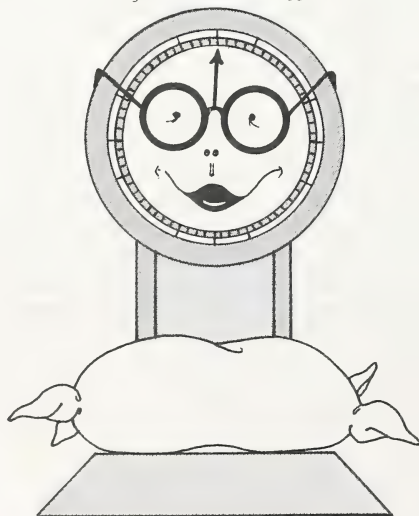


METRIC MEASURES ARE  
AVAILABLE IN THESE SIZES

250 mL replaces 1 cup  
500 mL replaces 2 cups



MUNSTER METRE  
MEASURES LENGTH



SAM KILOGRAM  
MEASURES WEIGHT



LILY LITRE  
MEASURES VOLUME

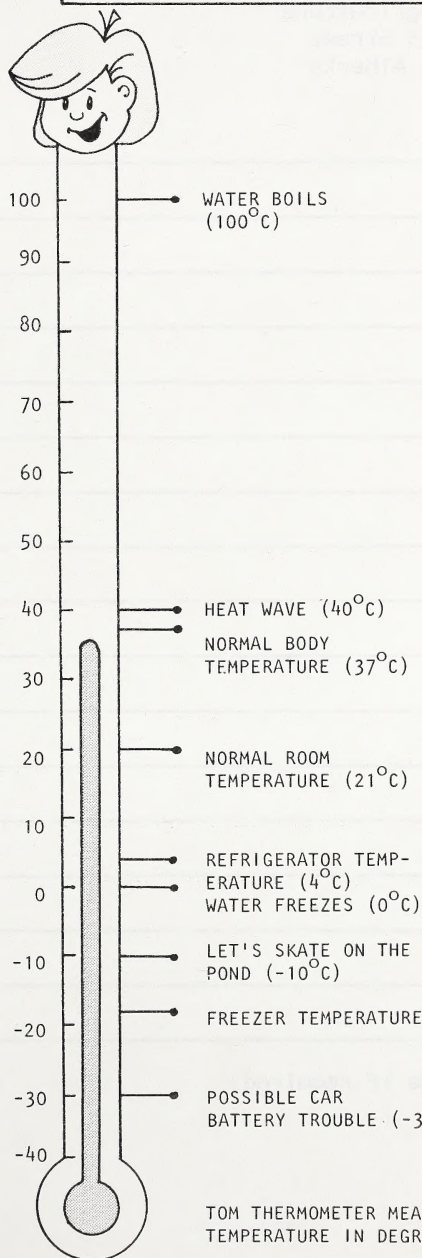
# METRIC MULTIPLES AND PREFIXES TABLE

Multiplying Factor	Prefix	Symbol
1,000,000 = $10^6$	mega (meg a)	M
1,000 = $10^3$	kilo (kil o)	k
100 = $10^2$	hecto (hek to)	h
10 = $10^1$	deka (dek a)	da
(Base Unit) 1 = $10^0$		
0.1 = $10^{-1}$	deci (des i)	d
0.01 = $10^{-2}$	centi (sen ti)	c
0.001 = $10^{-3}$	milli (mil i)	m
0.000,001	micro (mi kro)	$\mu$

(These prefixes may be applied to all metric base units.

Example: Base Unit = litre

Add kilo to litre (symbol kL) = kilolitre. The multiplying factor is 1000. This means a kilolitre equals 1000 litres.)



TEMPERATURE:  $^{\circ}\text{F} = 9/5 + 32$   
 $^{\circ}\text{C} = 5/9 - 32$

## OVEN TEMPERATURES:

	$^{\circ}\text{C}$	$^{\circ}\text{F}$
Very low	120-135	250-275
low	150-165	300-325
Moderate	175-190	350-375
Hot	200-220	400-425
Very Hot	230-245	450-475
Near boil	245-290	475-500

## ADDITIONAL METRIC INFORMATION

from:

Metric Branch  
 Alberta Government Services  
 12th Floor, Park Square  
 10001 Bellamy Hill  
 Edmonton, Alberta T5J 3C1

Metric Commission Canada  
 Box 4000  
 Ottawa, Ontario

Information Division  
 Canada Department of Agriculture  
 Ottawa, Ontario K1A 0C7

District Extension Office  
 OR

Publications Office  
 Alberta Agriculture  
 9718 - 107 Street  
 Edmonton, Alberta T5K 2C8



# PROJECT EVALUATION

In order to keep meeting your needs in the 4-H program, we would like your assistance in completing this evaluation form. Make your suggestions on this sheet as you use this book. After the project has been completed, mail this form to:

Project Evaluation  
4-H Branch  
Alberta Agriculture  
7000 - 113 Street  
Edmonton, Alberta  
T6H 5T6

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There is no handwriting or other markings on the paper.

(use another page if required)



N.L.C. - B.N.C.



3 3286 05549824 6

**Alberta**  
AGRICULTURE  
4-H BRANCH